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Assessing US Government Efforts to Support Fossil Fuel–Reliant Communities

By Dr. Noah Kaufman
February 2026

REPORT

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Executive Summary

The decline of domestic fossil fuel production in the United States poses serious economic risks for communities that rely on fossil fuel industries for jobs and public revenues. Many of these communities lack the resources and capacity to manage those risks on their own. The absence of viable economic strategies for affected regions is a barrier to building the broad, durable coalitions needed for an equitable national transition to cleaner energy sources.

President Joe Biden touted investments into fossil fuel–reliant communities as part of his administration’s broader place-based economic and climate change strategies. This study assesses those federal efforts, examining the rationale, design, and implementation status of the major programs involved.

The study’s findings can be summarized as a series of contrasts:

- *Unprecedented funding, limited delivery.* Major federal legislation in the early 2020s authorized support for fossil fuel–reliant communities at a scale that dwarfs prior efforts. However, actual disbursements remain a small share of authorized funding for many programs, and available data offer limited evidence that spending has effectively targeted these communities. Lengthy implementation processes were followed by significant policy reversals by the Trump administration.
- *Broad program portfolio, critical gaps.* Federal support spans a wide portfolio of programs, including clean energy and manufacturing incentives, remediation of legacy infrastructure, public infrastructure investments, and general economic development initiatives. While this breadth reflects the diverse challenges these communities face, the portfolio was shaped more by national legislative priorities than by a bottom-up assessment of local needs, resulting in notable gaps, such as fiscal stabilization for local governments facing steep revenue losses.
- *Focus on immediate distress, neglect of long-term risks.* Programs largely concentrate resources in communities already experiencing economic distress, particularly those affected by coal mine and power plant closures. This approach may be an efficient use of limited resources, but it leaves many fossil fuel–reliant communities, such as oil and gas–reliant regions, exposed to future risks.
- *Greater transparency, insufficient data.* The federal government took strides to improve transparency, including making available the open-source dataset on federal spending used



in this study. But without more granular and reliable data on both spending and economic outcomes, researchers cannot rigorously evaluate program effectiveness, compare approaches, or help policymakers scale successful models.

Taken together with the existing literature, these findings point to several priorities for a future federal strategy to support fossil fuel–reliant communities, including the following:

- Provide sufficient resources and capacity to regions facing both short-term and long-term economic risks from the energy transition, while enabling local communities to tailor solutions to their own specific challenges, opportunities, and preferences.
- Embed into policies data transparency, rigorous evaluation, and mechanisms for program adjustments based on iterative learning.
- Where possible, design programs to be durable and resilient to changes in political control, such as by securing bipartisan support.

Introduction

The United States is the world’s largest producer of oil and natural gas and the fourth largest producer of coal. Production is geographically concentrated, and in these areas communities are often highly dependent on fossil fuel industries for employment and revenues that fund schools and other public services (Kaufman et al. 2024).

A shift away from fossil fuels—whether driven by the recognition of the risks of climate change, local pollution, or the changing economics of energy technologies—poses significant, and sometimes existential, risks for fossil fuel–reliant communities. Economic prosperity is closely correlated with local production trends (Raimi et al. 2025). More broadly, the loss of dominant employers and taxpayers has led to prolonged economic distress in manufacturing towns (Autor et al. 2021). Severe economic contractions in communities where coal production has experienced large declines are evidence of the threats facing fossil fuel–reliant regions (Kaufman et al. 2024).

Public policies can help mitigate these risks. Communities with more diverse local economies are better able to withstand declines in local fossil fuel production, owing to broader employment opportunities for displaced workers and more resilient tax bases (Kaufman et al. 2024). The German government paired its coal phaseout with targeted and long-term support for its most coal-dependent region—€100 billion investments in new universities, industrial incentives, environmental restoration, and worker retraining—helping to avoid the severe economic dislocations observed in other coal phaseouts (Furnaro et al. 2021).

Although the federal government has unique resources to support local economic development, the United States has historically invested relatively little in struggling communities. Reflecting the prevailing economic thinking at the time, a President Carter–era federal commission urged policymakers to focus less on aiding struggling places and more on helping individuals move to areas of opportunity (Panel on Policies and Priorities for Metropolitan and Nonmetropolitan Areas 1980). President Ronald Reagan severely cut federal economic development programs, and his successors left manufacturing towns to face the challenges of globalization with minimal federal assistance (McCann 2023).

By the early 2020s, however, persistently struggling local economies and growing regional inequality prompted a shift, at least in rhetoric, from the federal government. President Biden’s strategy was “to rebuild the economy from the bottom up and the middle out,” contrasting it with prior “trickle down” strategies. His economic advisers emphasized “place based growth” in which “we lift communities up rather than leaving them behind” (The White House 2024). In one of his last



official acts, President Biden declared a legacy of helping left-behind communities and highlighting a wide range of place-based actions, including federal programs specifically designed to support fossil fuel–dependent communities (The White House 2025).

The track record of place-based economic development efforts is mixed. Although evidence supports policies that build human capital, strengthen institutions, and upgrade infrastructure, the empirical support for shorter-term job-creation measures is much weaker (Wolman et al. 2017). Careful study of ongoing federal efforts can help assess the effectiveness of different approaches and develop more effective strategies for the future.

This study offers an assessment of the federal government’s efforts in the early 2020s to provide fossil fuel–dependent communities with place-based economic support. The next section examines the major federal programs that made up this strategy, detailing their objectives and their implementation status as of mid-2025. The subsequent sections compare federal spending patterns and economic performance in communities with different types of fossil fuel infrastructure as well as those without.

This study is limited to new federal programs that support economic development in fossil fuel–reliant places. Related efforts, including other types of federal support for communities (to boost equity, reduce pollution, etc.) and state and local government programs, are beyond its scope.

The final section presents the study’s conclusions. While early-2020s legislation authorized unprecedented levels of funding and a broad portfolio of programs, actual delivery has been limited, unevenly targeted, and shaped more by national priorities than local needs. Although transparency has improved, persistent data limitations continue to impede rigorous evaluation and learning.

Recent Federal Programs to Support Fossil Fuel–Reliant Communities

This section provides an overview of recent federal programs that provide support to fossil fuel–dependent communities, organized by the legislation that initiated them. Table 1 summarizes key information, with additional details in Appendix A.¹

American Rescue Plan

The American Rescue Plan (ARP), enacted in March 2021, included major place-based initiatives aimed at catalyzing economic recovery from the pandemic. Among other place-based funding, the law appropriated \$3 billion in supplemental funding for the US Economic Development Administration (EDA), the primarily federal agency responsible for supporting local economic development.

The EDA announced a \$300 million “Coal Communities Commitment” to ensure that localities with coal mines and power plants would benefit from ARP funds. The agency exceeded this commitment, ultimately allocating about \$550 million to support economic development in coal communities (US Economic Development Administration 2025a).

By the end of 2022, the EDA had allocated nearly all \$3 billion appropriated to the agency via ARP across 780 projects nationwide (U.S. Government Accountability 2023). Projects remain at various stages of implementation. The Trump administration proposed eliminating the EDA in its fiscal year (FY) 2026 budget (Congressional Research Service 2025), which adds uncertainty to ongoing programs, although Congress appears unlikely to fully approve this request.

CHIPS and Science Act

While best known for boosting domestic semiconductor manufacturing, *the CHIPS and Science Act of 2022* also created place-based innovation programs. Through initiatives such as the Regional Technology and Innovation Hubs and the National Science Foundation’s (NSF’s) Regional Innovation Engines, CHIPS aimed to spread high-tech economic development beyond traditional coastal centers. While fossil fuel–reliant regions were not explicitly targeted by the law, several have secured awards under these programs.

For example, the EDA Recompete Pilot Program authorized \$1 billion to support labor markets with persistently low employment. In August 2024, the EDA announced \$184 million across six regions, including heavily coal-reliant eastern Kentucky (U.S. Economic Development Administration 2025b).



Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act (IIJA), signed in November 2021, authorized \$1.2 trillion in federal spending. Most of IIJA’s investments target traditional infrastructure such as roads, bridges, and airports. These initiatives will benefit fossil fuel–reliant regions, even though they do not target them explicitly. An exception is a \$2 billion program to fund rural transportation projects, which reserves 25 percent of funds for the Appalachian Development Highway System (ADHS), a network of roads designed to boost economic development in an isolated part of the country (Federal Highway Administration 2025b).

Key climate–focused initiatives in IIJA include investments in carbon capture technologies, regional clean hydrogen “hubs,” grants to support advanced energy manufacturing where coal mines or plants have closed, and clean energy demonstration projects on active or reclaimed mine lands. Following lengthy program development processes—during which federal agencies translate statutory language into detailed implementation procedures—initial awards for each of these programs were announced near the end of the Biden administration. However, only a small portion of the funding has been dispersed to recipients as of mid-2025 (see Tables A1 and A2 in Appendix A for details).

Some climate–focused IIJA initiatives are being scaled back or eliminated by the Trump administration. While a broad freezing of federal funding for infrastructure and climate projects in early 2025 was eventually rescinded by court orders (Somasundaram 2025), in May 2025, the Department of Energy (DOE) canceled \$3.7 billion in awards from its Office of Clean Energy Demonstrations (Howland 2025). The administration has promised additional spending reductions in the future (Jenkins and Martine 2025).

Non-climate–focused IIJA initiatives have faced less disruption. The law included various programs aimed at remediating legacy fossil fuel infrastructure—including abandoned mines and wells and former industrial sites—which pose environmental hazards and inhibit local economic development in communities across the country. These have remained in place.

The law also provided an additional \$1 billion over five years to the Appalachian Regional Commission (ARC), the agency tasked with boosting socioeconomic outcomes in the fossil fuel–reliant region. The Trump administration proposed steep funding reductions to the ARC in its FY2026 budget—reducing ARC’s regular annual funding from roughly \$200 million to \$14 million—but Congress has approved only a small portion of these spending cuts (Tebben 2025).

Inflation Reduction Act

The Inflation Reduction Act (IRA) of 2022 directed unprecedented federal resources toward clean energy. While most support took the form of nationwide tax credits, several provisions have place-based features. A tax credit for advanced energy manufacturing facilities includes a \$4 billion carve-out for projects near closed coal mines or retired coal plants; the tax credits for clean energy investment and production include bonuses for investments in designated “energy communities”; and the Department of Energy received \$250 billion in loan authority to redevelop retired energy infrastructure in ways that reduce greenhouse gas emissions.

Like the IJIA programs, many IRA programs went through years-long processes to convert statutory language into implementation procedures before any awards were dispersed, so fossil fuel–reliant communities have received limited funds to date (see Tables A1 and A2 in Appendix A for details). For example, funding for the manufacturing tax credits was fully committed in the final year of the Biden administration, but these projects are currently undergoing certification processes (US Department of Energy 2025h; U.S. Department of the Treasury 2025b). Meanwhile, DOE’s additional loan authority was committed primarily to building clean energy (e.g., the restart of a nuclear power plant) and to modernizing energy system infrastructure, rather than to investing in fossil fuel communities.

Through executive actions and the *One Big Beautiful Bill Act of 2025 (OBBBA)*, the Trump administration is targeting IRA programs for cost savings. Tax credits for solar and wind energy will be rapidly phased out, and funds from the DOE Loan Program were diverted to the new Energy Dominance Financing Program, with a mission unrelated to a transition away from fossil fuels (US Department of Energy 2025f; McDonald 2025).

The IRA included other place-based initiatives such as the Greenhouse Gas Reduction Fund (GGRF), Environmental and Climate Justice block grants, Industrial Demonstrations Program, and Climate-Smart Agricultural Conservation programs. Each has since been terminated or curtailed by recent executive actions or OBBBA (Columbia Law School’s Sabin Center for Climate Change Law and Environmental Defense Fund 2025).²

Table 1: Summary of place-based support for fossil fuel–reliant communities in recent federal legislation

Policy type	Examples	Status
General economic development	- Economic Development Administration’s cross-cutting Coal Communities Commitment (ARP): - Economic Adjustment Assistance Program - Good Jobs Challenge Program - Build Back Better Regional Challenge - Indigenous Communities Program - Statewide Planning, Research, and Networks Program - Recompete Pilot Program (CHIPS) - Appalachian Regional Commission funding (IIJA)	Most funds have been allocated and the programs are ongoing; proposed budget cuts to EDA and ARC introduce uncertainty.
Fiscal support	- Treasury State and Local Fiscal Recovery Fund (ARP) - Local Assistance and Tribal Consistency Fund (ARP)	Temporary pandemic–recovery programs; most funds have been spent.
Remediation programs	- Abandoned Mine Land Program (IIJA) - Orphaned Oil and Gas Wells Program (IIJA) - Brownfields Program (IIJA)	The programs are ongoing aside from temporary funding freezes; proposed budget cuts introduce uncertainty.
Transportation infrastructure	- Rural Surface Transportation Grant Program, including carve-out for Appalachia (IIJA) - Bridge Investment Program (IIJA) - National Electric Vehicle Infrastructure Program (IIJA) - Charging and Fueling Infrastructure Program (IIJA) - Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants Program (IIJA)	The programs are ongoing aside from temporary funding freezes; the Trump administration has removed the sustainability/equity focuses of RAISE.
Energy manufacturing	- Advanced Energy Manufacturing and Recycling Grant Program (IIJA) - Qualifying Advanced Energy Project Credit Program (IRA)	The programs are ongoing aside from temporary funding freezes; much of the grant and tax-credit authority has been allocated. Potential future project terminations introduce uncertainty.
Clean energy and climate solutions	- Clean Energy Demonstration Program on Current and Former Mine Land (IIJA) - Carbon Capture Demonstration and Pilot Projects programs (IIJA) - Regional Clean Hydrogen Hubs (IIJA) - Energy Infrastructure Reinvestment (EIR) Loan Program (IRA) - Energy Community Tax Credit Bonus (IRA) - Transmission Siting and Economic Development Grants Program (IRA) - Regional Direct Air Capture Hubs (IIJA) - Carbon Dioxide Transportation Infrastructure Finance and Innovation Program (IIJA) - Climate-Smart Agricultural Conservation Programs (IRA) - Industrial Demonstrations Program (IRA)	Grant programs saw initial awards announced late in the Biden administration; the programs are experiencing disruptions, including statutory changes in OBBBA and DOE project terminations. Further spending reductions are expected.
Equity/justice-focused efforts	- Greenhouse Gas Reduction Fund (IRA) - Environmental and Climate Justice Block Grants Program (IRA) - Reconnecting Communities and Neighborhoods Program (IIJA) - Neighborhood Access and Equity Grants Program (IRA)	Most programs have been discontinued, either with OBBBA rescinding remaining funds or agencies terminating awards.
Other	- Regional Technology and Innovation Hubs (CHIPS) - NSF Regional Innovation Engines Program (CHIPS) - Travel, Tourism, and Outdoor Recreation Program (ARP)	The programs are ongoing; most funds have already been allocated.

Additional Technical Assistance

Communities often struggle to access federal funding. Therefore, in addition to programs with large funding opportunities, federal efforts to support fossil fuel–reliant communities included various programs to provide technical assistance and capacity. Table 2 summarizes certain initiatives with potential to support fossil fuel–reliant communities’ efforts to obtain federal funds and to implement the programs.

Table 2: Federal capacity-building programs with support for fossil fuel–reliant regions

Program	Description	Status
Energy Communities Interagency Working Group	Partnership between agencies to coordinate support for coal-reliant communities	Ended by the Trump admin
Building Resilient Economies in Coal Communities Initiative	A “community of practice” for coal regions, led by the National Association of Counties	Ended by the Trump admin with a lapse in funding
Rural Partners Network	US Department of Agriculture program to help communities identify federal economic development funding opportunities	Ended by the Trump admin
DOE’s Communities Local Energy Action Program	A DOE pilot program to help localities with clean energy–driven economic development	Ended by the Trump admin after the pilot phase
Clean Energy on Mine Land (CEML) Technical Assistance Program	A National Renewable Energy Laboratory initiative for technical assistance for clean energy development on mine lands	Ended by the Trump admin
“Thriving Communities” Programs	Various initiatives (DOT/Housing and Urban Development/EPA/DOE) to help disadvantaged communities compete for federal grants	The programs appear active, but many grants terminated and no new funding or activities announced in 2025
Capacity Building for Repurposing Energy Assets	A DOE program to support local leaders involved in repurposing retiring/retired energy assets	The program appears active, but no new funding or activities announced in 2025



For example, President Biden established via executive order the Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization Activities. This group was a partnership between 12 federal agencies that coordinated government efforts to support the goals of coal-reliant communities. In six regions facing coal facility closures, “rapid response teams” collaborated with local stakeholders to address the needs of the communities and help them access federal resources (Dalbey and Raimi 2024). Neither this working group nor the other programs listed in Table 2 are continuing to operate in 2025 (Duff 2024; House Committee on Appropriations – Republicans 2025).

While the total available funding is difficult to quantify with specificity, the programs outlined in this section collectively provided hundreds of billions of dollars of potential support for fossil fuel–reliant communities, an increase of roughly an order of magnitude over previous years. This influx of resources spans a wide mix of program types, including general economic development, subsidies for specific technologies or sectors, local infrastructure improvements, and the remediation of legacy infrastructure. The composition of this portfolio generally reflected the aims of the underlying pieces of legislation: ARP emphasized pandemic recovery, CHIPS emphasized innovation, IIJA emphasized infrastructure, and IRA emphasized clean energy.

Although program announcements often highlighted large total funding levels, many programs distributed relatively little money during the Biden administration because of the lengthy implementation processes. Some programs have continued into the first year of the Trump administration, particularly those focused on traditional infrastructure and manufacturing. However, many other programs—especially those centered on climate, equity, and capacity building—have been severely disrupted or canceled.

Federal Spending in Fossil Fuel–Reliant Communities

This section examines available data on federal spending in communities with fossil fuel infrastructure. This analysis assesses the degree to which targeting of support shows up in county-level federal spending data. Federal spending is an imperfect indicator of support because a dollar spent through a well-designed program may deliver greater benefits than a dollar spent through a poorly targeted or ineffective one.

The analysis relies on the official open data source of federal spending information: USASpending.gov. Data on actual spending outlays are inconsistent, so the analysis focuses on annual “prime award obligations,” which are legally binding commitments to future spending. Appendix B describes the remaining methodological choices, as well as important limitations of the dataset.

Following Raimi et al. (2022) and Kaufman et al. (2024), the analysis divides US counties into five mutually exclusive categories, displayed in Table 3. Three of the categories consist of counties with certain fossil fuel infrastructure, and the remaining two categories are included for comparison (and separated by population because fossil fuel production often occurs in rural counties with small populations).

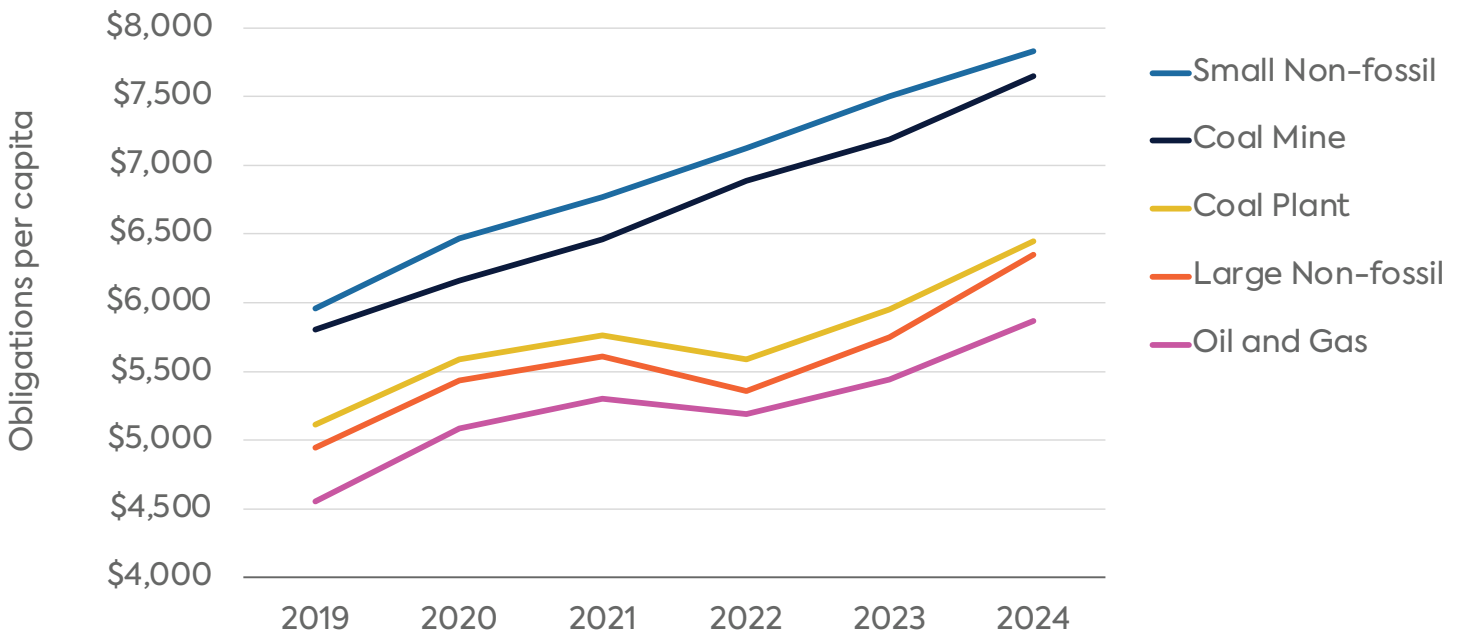
Table 3: Categories of US counties based on fossil fuel infrastructure

Category	Description
Coal Plant	Counties with at least one coal-fired power plant operating or closed after 2010. Coal mines may be in these counties as well.
Coal Mine	Counties with at least one coal mine operating or closed after 2000 but no coal power plants. These are typically small, rural counties that are especially vulnerable to production declines.
Oil and Gas	Counties with oil or gas wells or refineries but no coal power plants or coal mines. Counties with only natural gas or oil power plants are excluded, since they are often in large metro areas that are not heavily dependent on fossil fuels.
Small Non-Fossil	Counties with fewer than 100,000 residents and none of the fossil fuel infrastructure contained in the other categories.
Large Non-Fossil	Counties with more than 100,000 residents and none of the fossil fuel infrastructure contained in the other categories.



Figure 1 shows per-capita funding by county categories across all federal agencies in the dataset. Obligations increased between 2019 and 2024 across all categories during a period of high inflation (because price changes vary across regions, this analysis does not apply a single national deflator to adjust for inflation). Per-capita obligations are generally larger in less populous counties.

Figure 1: Annual federal funding per capita by county category



*Note: Data is displayed by fiscal year in nominal dollars. See Appendix B for methodological details.
Source: Usaspending.gov.*

Figure 1 does not show counties with fossil fuel infrastructure receiving disproportionately larger funding increases than non-fossil counties following the major federal spending laws of the early 2020s. This mainly reflects the composition of federal spending. Roughly two-thirds of the obligations in Figure 1 come from the Social Security Administration and the Department of Health and Human Services (which administers Medicare and Medicaid), underscoring the dominance of entitlement programs in federal spending. The place-based programs described in the prior section represent a much smaller share.

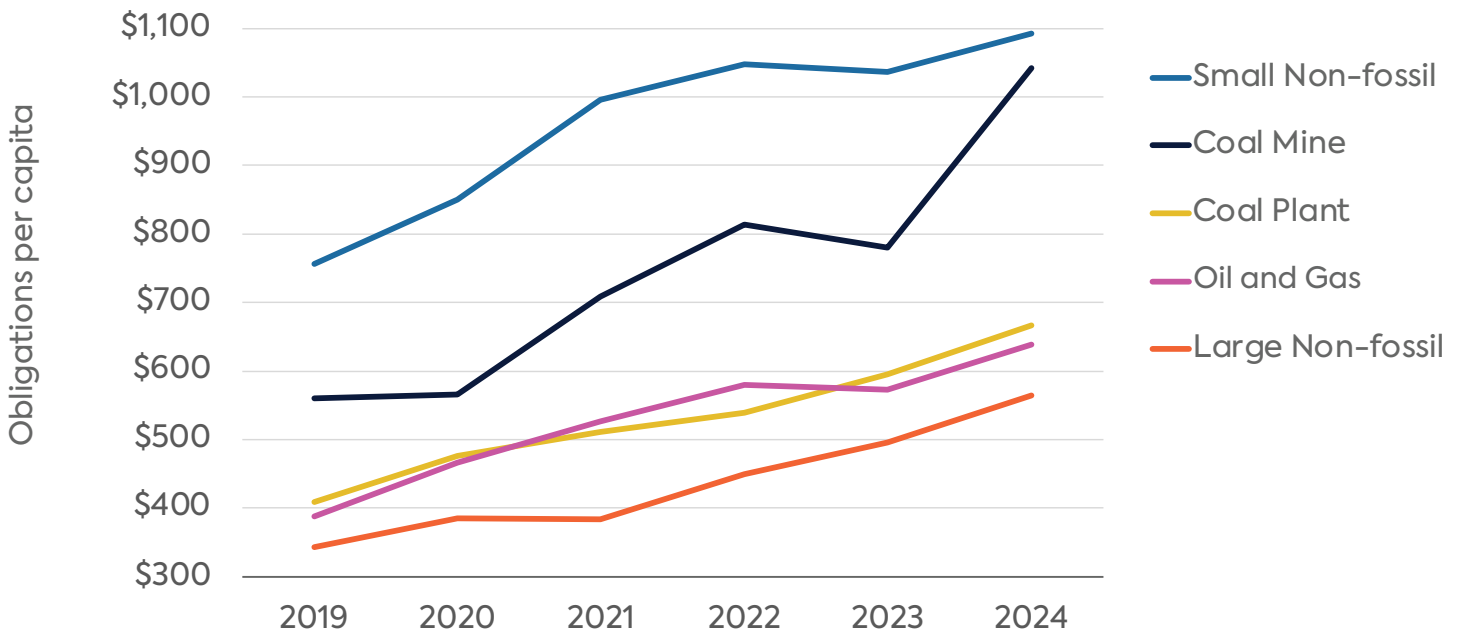
To better capture the place-based programs described in the previous section, the analysis next focuses on spending from the federal agencies tasked with providing that support. Specifically, the dataset is narrowed to spending from eight federal agencies highlighted by President

Biden’s “Energy Communities” taskforce: Appalachian Regional Commission, US Department of Agriculture, Department of Commerce, Department of Energy, Department of Labor, Department of the Interior, Department of Transportation (DOT), and Environmental Protection Agency (EPA; Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization 2024).³

Figure 2 shows such per capita funding by county category. Even within these selected eight agencies, there is little sign of disproportionate funding to fossil fuel–reliant counties through fiscal year 2023. This likely reflects a combination of several factors: the size of the programs targeting fossil fuel–reliant communities in the context of other spending from these agencies; the slow progress in implementing these programs; and the relatively weak targeting of fossil fuel–reliant regions in programs designed for that purpose—for example, IRA’s “energy communities” tax credit is available to nearly half the land mass of the lower 48 states (Ashenfarb 2025).

A sharp exception occurred in 2024, when Coal Mine counties received a large funding increase, driven primarily by funding from the DOT. Total funding for Coal Mine counties increased by \$1.2 billion between fiscal years 2023 and 2024, with over \$1.1 billion coming from DOT. The five largest sources were Federal Highway Administration grants to projects in Alabama, Pennsylvania, and West Virginia.⁴

Indeed, across the full period, nearly 70 percent of spending from these eight agencies came from DOT. In contrast, the Department of Commerce, the lead federal agency for regional economic development and many of the programs reviewed in the prior section, accounted for only about 4 percent of total spending across the selected eight agencies.

Figure 2: Annual federal funding per capita by county category from eight key agencies

*Note: Data is displayed by fiscal year in nominal dollars. See Appendix B for methodological details.
Source: Usaspending.gov.*

Data limitations, described in Appendix B, prevent rigorous evaluations of how effectively federal programs support fossil fuel–reliant communities. But given the implementation statuses outlined in the prior section, even a complete dataset would likely show that only modest amounts of funding have reached these communities so far. Despite the Biden administration’s emphasis on place-based economic policy, actual funding flows to fossil fuel–reliant regions remain relatively limited.

Economic Performance in Fossil Fuel–Reliant Regions

A central aim of place-based programs is to strengthen local economies. An assessment of these programs should include an examination of the degree to which they improved economic outcomes compared to their prior trajectory.

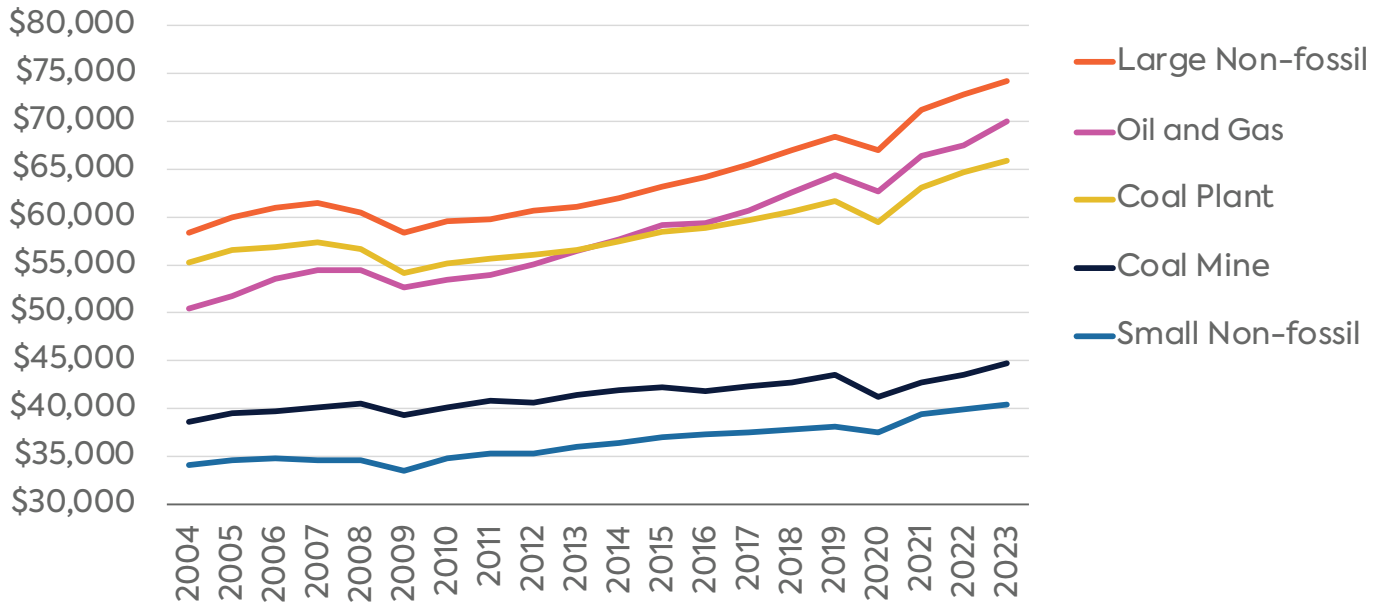
Given the findings of the previous sections, it would be surprising to observe measurable effects from recent federal efforts to support fossil fuel–reliant regions. Moreover, local economic development efforts typically take many years to generate observable impacts (if they ever do), and county-level economic data is only available through 2023.

Kaufman et al. (2024) analyzed the economic performance in counties with and without fossil fuel infrastructure from 2004 to 2019, the period before passage of the major federal laws described in the prior sections. Figures 3 and 4 update this analysis through 2023, with county-level data on gross domestic product (GDP) and personal income per capita, respectively, and the same county categorizations outlined in the previous section (see Appendix B for detail).⁵

The updated figures show a continuation of past trends, with economic performance tracking fossil fuel production. From 2019 to 2023, coal production continued to decline and oil and gas production increased. County-level GDP data show the economies in the Oil and Gas counties continuing to outperform in the early 2020s, while Coal Mine counties experienced the slowest growth since 2019.

Among the counties with fossil fuel infrastructure, the personal income trends are similar, with Oil and Gas counties continuing to outperform and Coal Mine counties continuing to underperform.

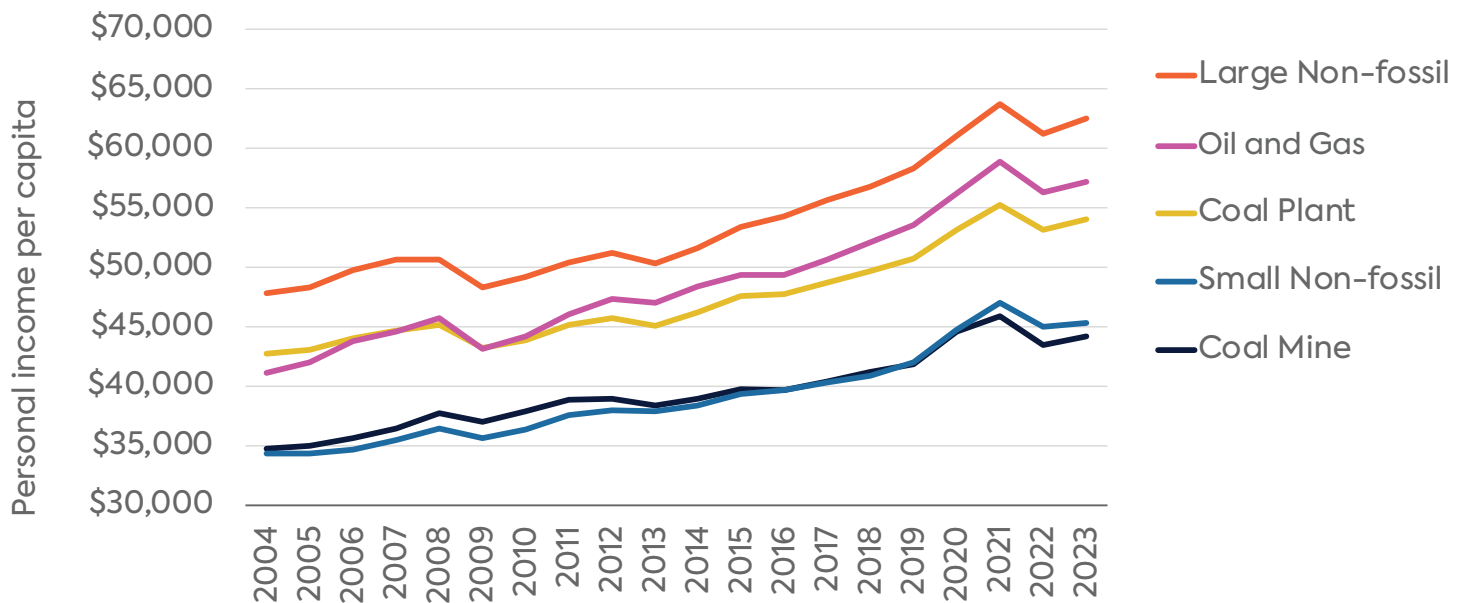
Figure 3: Gross domestic product per capita by county category



Note: Data is displayed in real 2017 dollars. See Appendix B for methodological details.

Source: US Bureau of Economic Analysis, <https://www.bea.gov/data>.

Figure 4: Personal income per capita by county category



Note: Data is displayed in real 2017 dollars. See Appendix B for methodological details.

Source: US Bureau of Economic Analysis, <https://www.bea.gov/data>.

Findings and Recommendations

This study’s analysis of recent federal efforts to support fossil fuel–dependent communities points to the following takeaways.

Unprecedented funding. The American Rescue Plan, the CHIPS and Science Act, the Infrastructure Investment and Jobs Act, and the Inflation Reduction Act collectively provided a level of federal attention to fossil fuel–reliant regions not seen in decades or longer. Bartik (2020) estimated that prior to these laws, the federal government spent about \$10 billion annually on place based economic development. By contrast, the recent programs specifically targeting fossil fuel regions (see Table A1 in Appendix A) amount to several multiples of that figure.

Given the resource constraints facing subnational governments, considerable federal funding may be a necessary component of a successful strategy to mitigate economic risks to fossil fuel–reliant communities. However, large funding levels alone are insufficient—effective policy design and implementation are necessary as well.

A diverse portfolio of place-based policies, shaped by each law’s focus. Federal support has reached fossil fuel–reliant regions through a broad mix of programs: clean energy incentives (e.g., IRA’s tax credits for clean energy production and manufacturing), remediation of legacy infrastructure (e.g., IIJA’s orphaned oil and gas wells program), public infrastructure investments (e.g., IIJA funding for highway, bridges, and electronic vehicle [EV] charging), and general economic development initiatives (e.g., ARP’s Assistance to Coal Communities program). This breadth of programs implemented in the early 2020s reflects the diverse challenges these communities face (Clarke et al. 2024).

However, the policy portfolio was not intentionally designed as an integrated strategy to support fossil fuel–reliant communities. Programs were shaped by the objectives of their authorizing legislation—pandemic recovery for ARP, infrastructure for IIJA, innovation for CHIPS, and clean energy for IRA—rather than by a coordinated place-based development agenda. As a result, some of the most pressing community needs, such as fiscal stabilization for local governments facing steep revenue losses, received limited attention.

A focus on communities facing hardships today. The place-based programs described in this report largely concentrate resources in communities already experiencing economic distress. For example, the fossil fuel community carve-out of the IRA’s 48C manufacturing tax credit program applies only to areas where coal facilities have retired.

There are reasons for this approach. Policymakers may view targeting communities in immediate

hardship as the most effective use of scarce resources. In addition, injecting substantial federal spending into regions operating near full employment can raise prices or crowd out private investments, whereas in regions with high unemployment an injection of federal funding can create jobs (Austin et al. 2018).

Applied to fossil fuel regions, this logic has led to a strong emphasis on coal communities that are already in decline due to the sharp decrease in domestic coal production. Yet the energy transition poses risks for a broader set of fossil fuel–reliant areas, many of which remain economically stable today but face significant future risks.

Large headline funding amounts, but small disbursements. Policymakers often tout a program’s headline funding figures. But for many of the programs supporting fossil fuel–reliant communities, actual disbursements of funds remain a small fraction of these totals. For example, the IJJA’s Advanced Energy Manufacturing and Recycling Grant Program took years to move from authorization to initial awards.

Slow implementation progress under the Biden administration has been followed by significant policy reversals under the Trump administration. The One Big Beautiful Bill Act rescinded major portions of IRA spending authority, federal agencies have canceled funding for selected projects, and the Trump administration has proposed budgets that substantially scale back other initiatives.

These changes reduce the resources available to fossil fuel–reliant communities and disrupt planning efforts underway. They also limit opportunities to assess program effectiveness, making it harder to learn from successes and failures. Over the longer term, incomplete or reversed implementation may also erode trust in federal commitments. Community leaders may view future federal place-based policies with greater skepticism, which could reduce their willingness to participate in such efforts.

Limited evidence of successful targeting. The Biden administration touted large investments into fossil fuel–reliant communities (White House 2025). But the data on county level spending obligations examined in this report did not provide strong evidence of disproportionate federal spending in fossil fuel–reliant communities.

This finding partly reflects the relatively small disbursements from place-based programs compared to other categories of federal spending, such as entitlements or transportation infrastructure, as well as slow implementation progress. It may also reflect the weak targeting of fossil fuel–reliant communities from programs designed for that purpose.

Data limitations inhibit rigorous evaluation. US federal government transparency on spending data has improved in recent years, notably through the 2014 Data Act and the launch of USASpending.

gov as the official data source for federal spending. Yet important gaps remain. No comprehensive program level dataset exists to reliably track federal spending into localities. This study also uncovered numerous errors and inconsistencies in USASpending.gov data. The federal staff at the Department of Commerce who helped the author address these issues in 2024 are no longer in place as of mid-2025.

Without more granular, reliable data, researchers and policymakers cannot credibly evaluate the effectiveness of policies, compare approaches, or scale successful models.

Fossil fuel–reliant local economies face serious risks from future production declines. Despite the surge of available funding in the early 2020s, the United States continues to lack a sustained federal strategy to help communities mitigate those risks. Combined with the existing literature, this study suggests several recommendations for future efforts.

Tailor strategies to specific community needs. Effective strategies should be tailored to the specific challenges and opportunities within individual communities, with the federal government providing resources and capacity to help address them. Such a strategy would encompass all communities confronting acute economic pressures from the transition away from fossil fuels, while recognizing that the appropriate solutions will differ substantially between regions, including coal communities facing near-term facility closures and booming oil and gas communities facing longer-term vulnerabilities.

Improve data transparency. Given the mixed evidence on program effectiveness, policymakers should build programs with stronger data transparency, rigorous evaluation requirements, and commitments to iteratively adapting approaches based on what proves successful.

Strengthen policy durability. The experience of the early 2020s underscores the critical importance of policy durability, ensuring that any strategy has enough institutional and political support to survive changes in political control. For example, programs in the bipartisan *Infrastructure Investment and Jobs Act* have generally experienced less disruption than programs in the *Inflation Reduction Act*, which passed Congress on a purely partisan basis.

Appendix A: Recent Federal Programs That Support Fossil Fuel–Reliant Local Economies

This appendix provides a more detailed overview of the recent federal programs that provide support to fossil fuel–dependent communities, organized by the legislation that initiated them. Table A1 includes programs that specifically target fossil fuel–dependent communities, while Table A2 includes broader place-based programs that are likely to benefit these communities.

Table A1: Place-based policies targeted at fossil fuel–reliant regions in recent federal legislation

Program	Description	Status
American Rescue Plan		
Assistance to coal communities (implemented via various EDA programs)	EDA grants for economic development in coal-reliant regions. Established in 2015 with a \$10 million appropriation, EDA expanded the initiative with a \$300 million Coal Communities Commitment of ARP funding.	EDA exceeded its \$300 million commitment, allocating \$551.8 million to coal communities. This funding involved 89 projects and \$208 million from the Economic Adjustment Assistance Program and \$243 million across nine of the Build Back Better (BBB) Regional Challenge projects (US Economic Development Administration 2025a). The total budget authority for the EDA’s Assistance to Coal Communities program was \$48 million in FY2023 and \$75 million in FY2024, compared to \$30 million in the years prior to the ARP. FY2024 was two years into the five-year implementation period for the BBB Regional Challenge awards, so much of the funding remains to be distributed. (Congressional Research Service 2025)

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Program	Description	Status
Infrastructure Investment and Jobs Act		
DOI Abandoned Mine Land (AML) program	A long-standing program (since 1977) to remediate hazardous abandoned coal mine sites. Historically funded by fees on coal production, IIJA expanded the program and adjusted the fee structure, authorizing \$11.3 billion over 15 years. (US Department of the Interior, Office of Surface Mining Reclamation and Enforcement 2025)	Prior to IIJA, annual disbursements for AML ranged between \$100 and \$150 million. IIJA authorizes \$725 million in annual spending; Congress distributed roughly \$700 million per year in the first two years. According to DOI it will take five years for states and tribes to fully staff up to effectively implement the additional funding from IIJA. The program is continuing in 2025 aside from uncertainty surrounding temporary funding freezes and staffing cuts. (US Department of the Interior 2020, 2024a, 2024b, 2025; Feldgus and Mooney 2024)
DOE Clean Energy Demonstrations Program on Current and Former Mine Land (CEML)	Competitive grants of \$500 million authorized to demonstrate clean energy projects on active or reclaimed mines. These projects aim to be replicable in order to provide knowledge and experience that can catalyze the next generation of clean energy projects on mine lands. (Barnes 2021)	In March 2024, the Biden administration announced award negotiations for \$475 million to five demonstration projects on mine lands, including for solar, geothermal, pumped storage hydropower, battery energy solar systems, and microgrids. One project in Kentucky received an initial grant of over \$12 million. CEML continues under the Trump administration. However, the DOE office that implemented the program has been eliminated and an associated technical-assistance program at NREL is no longer active. (Ingram 2024; Mendoza 2024; US Department of Energy 2025j; National Renewable Energy Laboratory 2025)

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Program	Description	Status
Infrastructure Investment and Jobs Act (cont'd)		
DOE Advanced Energy Manufacturing and Recycling Grant Program	The Advanced Energy Manufacturing and Recycling Grant Program, funded by IIJA with \$750 million, provides grants to small- to medium-sized manufacturers to build or retrofit advanced energy industrial facilities in communities where coal mines or coal power plants have closed. Eligible projects had to focus on the production or recycling of advanced energy technologies and low carbon materials, or to re-equip a facility with equipment designed to reduce greenhouse gas emissions. (US Department of Energy 2024b)	In October 2024, DOE announced that \$428 million in grants for 14 projects were selected for award negotiations. The projects aimed to accelerate domestic clean energy manufacturing in 15 coal-reliant communities. The program is continuing in 2025. Significant staffing and budget reductions at the implementing agencies, along with recent grant cancellations in related portfolios, increase the risk that projects could face delays, revisions, or future terminations. (US Department of Energy 2024c)
Appalachian Regional Commission (ARC)	The ARC is a federal–state partnership established in 1965 to promote sustainable community and economic development in the 13–state Appalachian region, focusing on job creation, infrastructure improvements, and workforce development. In 2015 the ARC launched the Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative to address the effects of the economic downturn of the coal industry. IIJA includes \$1 billion in funding for the ARC over five years, starting in FY2022, to accelerate economic development in Appalachia.	ARC received \$200 billion in additional funding in FY2022–FY2024 due to IIJA (and roughly \$400 billion in total annual funding). Funds awarded for POWER Initiative grants in coal communities averaged \$66 million in FY2022–FY2024, compared to an annual average of \$50 million in the three prior fiscal years. So most of the additional funds from IIJA went to ARC projects aside from POWER. The Trump administration proposed steep cuts to the ARC in its FY2026 budget proposal. (Appalachian Regional Commission 2025; Lawhorn 2024; Tebben 2025)

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Program	Description	Status
Infrastructure Investment and Jobs Act (cont'd)		
DOI orphaned oil and gas wells program	The Federal Orphaned Well Program, established under IIJA, provides \$4.7 billion to the Department of the Interior to plug, remediate, and reclaim abandoned oil and gas wells and associated facilities that pose environmental hazards and limit other land uses. It includes a program for wells on federal land and waters (\$250 million), a state program for wells on state and private lands (\$4.275 billion), and a tribal program (\$150 million). The federal program was designed to distribute project funding in roughly equal proportions over about five years. (US Department of the Interior 2023)	The Federal Orphaned Well Program distributed roughly \$50 million per year from FY2022 to FY2024. Over \$1 billion had been awarded under the state program by the end of FY2024, including about \$528 million in FY2024. Also, \$69 million had been awarded to tribes by the end of FY2024, including \$30 million in FY2024. The program is continuing in 2025, although some funding was temporarily frozen. (Bowlin 2025)
EA Brownfields Program	A brownfield is a property where the presence of hazardous substances inhibits redevelopment or reuse. Since 1995, EPA has funded local states and communities to help prevent, assess, clean up, and redevelop brownfield sites. IIJA provided more than \$1.5 billion in funding to EPA's Brownfields Program over five years, including \$1.2 billion in project grants and \$400 million to state and tribal programs. (US Environmental Protection Agency 2022, 2025a)	The FY2023 budget and FY2024 budget provided between \$210 and \$220 million per year for EPA's Brownfields Program. For comparison, in FY2019 brownfields projects received roughly \$90 million in funding from EPA, so annual funding has increased by about \$120–\$130 million, although only a fraction of these funds is dispersed to fossil fuel–reliant communities. The program is continuing, and it received similar levels of funding as the prior year in FY2025. The Trump administration's FY2026 budget proposal cuts annual funding for brownfields in half; whether Congress will approve this request is unclear. (US Environmental Protection Agency 2025b)

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Program	Description	Status
Infrastructure Investment and Jobs Act (cont'd)		
DOE Carbon Capture Demonstrations and Pilot Projects	IIJA funded multiple programs designed to prove out carbon capture and storage (CCS) technologies at scale. The Carbon Capture Demonstration Projects Program includes over \$2.5 billion in funding in two buckets: \$189 million for carbon capture demonstration front-end engineering design (FEED) studies and \$1.7 billion for carbon capture demonstration projects that can be readily replicated and deployed at power plants and major industrial sources of carbon emissions. The Carbon Capture Large-Scale Pilot Program includes \$937 million for projects that reduce emissions from electricity generation and hard-to-abate industrial operations. IIJA separately provided funding for programs related to carbon dioxide storage, transportation infrastructure, and utilization, as well as direct air capture (DAC). (US Department of Energy 2025a, 2025b)	In late 2003, DOE announced support for CCS demonstration projects for power plants in California, North Dakota, and Texas. In early 2024, DOE announced four pilot projects for power plants and industrial facilities in Kentucky, Mississippi, Texas, and Wyoming. These projects were selected for award negotiations. Only a small percentage of the grants have been dispersed to date. In May 2025 DOE announced the termination of support for certain CCS projects, including the demonstration projects at power plants in California and Texas. (Ingram 2024; Howland 2025; US Department of Energy 2024a, 2025j)
Regional Clean Hydrogen Hubs Program	Regional Clean Hydrogen Hubs is an \$8 billion program funded by IIJA to jump-start a domestic clean hydrogen industry with a national network of producers, consumers, and infrastructure. The law requires that at least two of the hubs are in natural gas–rich regions. (Houghtalen 2022)	In October 2023, seven hydrogen hubs were selected for award negotiations for up to \$7 billion in funding. The Appalachian, Gulf Coast, Midwest, and Heartland hubs plan to use natural gas to produce hydrogen. In August 2024, DOE announced initial funding of \$30 million to the Appalachian hub. In late 2024 and early 2025, DOE announced initial funding of \$64 million for the other three hubs in natural gas regions. The Trump administration has reduced funding for certain hydrogen projects, including a clean hydrogen-fueled plastic production facility in Texas. (The White House 2023; Rubin 2024; Morgan Lewis 2024; Laity 2025; Osborne 2025)

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Program	Description	Status
Infrastructure Investment and Jobs Act (cont'd)		
Rural Surface Transportation Grant Program	The program funds projects to improve and expand the surface transportation infrastructure in rural areas of the country. It aims to increase connectivity, improve the safety and reliability of the movement of people and freight, and boost regional economic growth and socioeconomic outcomes. IIJA authorized \$2 billion in funding over five years, with a 25 percent carve-out for projects that further the completion of designated routes of the Appalachian Development Highway System, which is a series of local and regional routes that aim to improve economic development opportunities in the coal-reliant region. (Federal Highway Administration 2025b)	Funding for the program increased from \$300 million in FY2022 to \$350 million in FY2023 to \$400 million FY2024. The program remains active in 2025. In FY2022, the Pennsylvania Department of Transportation received a \$69 million grant for the Central Susquehanna Valley Transportation Project, part of the ADHS. According to ARC, ADHS projects received no new funding in FY2024. (Appalachian Regional Commission 2024)
Inflation Reduction Act		
Qualifying Advanced Energy Project Credit Program	The American Recovery and Reinvestment Act of 2009 established this advanced energy manufacturing tax credit program (referred to as “48C”). The IRA revived and expanded the program, with a \$10 billion investment, including a carve-out of \$4 billion for census tracts with a coal mine that closed after 1999 or a coal-fired generating unit that retired after 2009. Advanced energy projects include manufacturing equipment to generate renewable energy, manufacturing fuel cells and grid modernization, low-carbon fuels, energy conservation, electric vehicles and hybrid heavy-duty vehicles, and projects that re-equip facilities with emissions reduction measures and those involved with the processing of critical minerals. (US Department of Energy 2025h)	In March 2024, the Biden administration announced the selection of \$4 billion in projects across 35 states, with \$1.5 billion supporting projects in historic energy communities. In January 2025 the remaining \$6 billion in projects were selected, with \$2.5 billion to approximately 50 projects located in energy communities. For selected projects to receive the tax credit, information will need to be submitted to the 48C portal within two years to certify the project. (US Department of Energy 2025h; US Department of the Treasury 2025b)

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Program	Description	Status
Inflation Reduction Act (cont'd)		
Energy Infrastructure Reinvestment (EIR) Loan Program	Created by the IRA and as part of the DOE Loan Programs Office (LPO), the EIR program aimed to provide cost-competitive debt financing to projects that either retool, repower, repurpose, or replace energy infrastructure that has ceased operations or that enables operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants or greenhouse gas emissions. The IRA set the cap on total loan guarantees to \$250 billion, and appropriated \$5 billion through September 30, 2026, to support those loan guarantees. (US Department of Energy 2025d)	LPO announced its first loan guarantees under this program in 2024 and early 2025. While the mission of EIR was well aligned with supporting fossil fuel–reliant communities, the investments focused instead on building clean energy (e.g., the restart of a nuclear power plant) and modernizing energy infrastructure. The One Big Beautiful Bill Act diverted the remaining funds from EIR to a new program called the Energy Dominance Financing Program. (US Department of Energy 2025f; McDonald 2025)
Energy Community Tax Credit Bonus	The IRA's Production Tax Credit (PTC) provides a subsidy for qualifying clean electricity generation, and the Investment Tax Credit (ITC) reduces the federal income tax for a percentage of the cost of installing a qualifying clean energy facility. Among other “bonus tax credits,” an additional 10 percent (for the PTC) or 10 percentage points (for the ITC) is available for projects sited within “energy communities,” which are either brownfield sites, communities with high levels of unemployment or tax revenue from the fossil fuel supply chain, or communities with coal mine or coal-fired power plant closures. (Seel et al. 2024)	The IRS issued initial guidance on the definition of an eligible energy community in 2023 and updated the guidance in 2024. About 40 percent of the land area of the contiguous US qualified as an “energy community.” Qualifying projects that began construction starting in 2023 are eligible for the bonus tax credit. Substantial clean energy investments have been made in energy communities, particularly in solar, wind, and battery storage. The One Big Beautiful Bill Act rapidly phases out the PTC and ITC for solar and wind energy, and it added additional restrictions to the tax credits for other technologies, which will lead to reduced bonus tax credit payments into fossil fuel communities. (Ashenfarb 2025; Seel et al. 2024; Center on Global Energy Policy 2025)

Table A2: Place-based policies in recent federal legislation not targeted at fossil fuel–reliant regions but likely to benefit these communities

Program	Funding Level	Purpose/Details
American Rescue Plan		
EDA Economic Adjustment Assistance Program	\$500 million	Flexible grants for communities to plan and implement projects responding to economic disruptions. Grants support a wide range of activities, including infrastructure, business development, and workforce training. (US Economic Development Administration 2025c)
EDA Good Jobs Challenge	\$500 million	Grants to develop regionally tailored workforce training systems in key industries, with a focus on job placement for unemployed and underserved workers. The program funds partnerships among employers, training providers, unions, and other stakeholders. (US Economic Development Administration 2025d)
EDA Travel, Tourism, and Outdoor Recreation Program	\$750 million	Grants to assist communities with economies that were disproportionately affected by the COVID-19 pandemic due to reliance on the travel, tourism, and outdoor recreation sectors. The program includes grants to support marketing, outdoor recreation infrastructure, and hospitality sector revitalization. (US Economic Development Administration 2025g)
EDA Build Back Better Regional Challenge	\$1 billion	Grants to coalitions of regional actors to develop industry clusters in sectors including transportation, agriculture, and advanced manufacturing. The grants support investments in workforce training, childcare services, industrial site redevelopment, and small business incubators and accelerators. (US Economic Development Administration 2025b)
EDA Indigenous Communities Program	\$100 million	Grants for tribal governments and Indigenous communities to spur economic recovery from the pandemic and to build resilient local economies. The program funds projects tailored to Indigenous community needs, including infrastructure, business development, workforce, and planning. (US Economic Development Administration 2025e)
EDA Statewide Planning, Research, and Networks Program	\$90 million	Supports state economic development planning (every state received a \$1 million planning grant) and funding for “communities of practice” networks to share best practices. Aims to build capacity for economic development at state and regional levels. (US Economic Development Administration 2025b)

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Program	Funding Level	Purpose/Details
American Rescue Plan (cont'd)		
US Treasury State and Local Fiscal Recovery Fund	\$350 billion	Grants were distributed to over 30,000 recipient governments at the state, territorial, local, and tribal levels. The funding was used to support activities including replacing lost revenue, investing in infrastructure, and responding to public health and economic impacts of the pandemic. The Treasury Department reported that nearly all of the funding was dispersed as of FY2024. (US Department of the Treasury 2025a)
CHIPS and Science Act		
EDA Recompete Pilot Program	\$1 billion authorized/ ~\$200 million appropriated	Long-term economic development grants targeting persistently distressed regions (areas with low prime-age employment rates). Grants for this pilot program can fund activities including infrastructure, job creation, entrepreneurship, and workforce programs. (US Economic Development Administration 2025b)
EDA Regional Technology and Innovation Hubs (“Tech Hubs”)	\$10 billion authorized/ ~\$500 million appropriated	Grants to cultivate regional innovation hubs in strategic sectors—including artificial intelligence, clean energy, and biotech—outside the traditional tech center regions. Activities include research and development (R&D), entrepreneurship, and workforce development. (US Economic Development Administration 2025f)
NSF Regional Innovation Engines	\$1.6 billion authorized/ ~\$150 million committed	Funds partnerships among universities, industries, and governments to advance R&D and technology commercialization in regions lacking strong innovation ecosystems. (National Science Foundation 2025)
Infrastructure Investment and Jobs Act		
Reconnecting Communities and Neighborhoods Program	\$4.2 billion	Department of Transportation program that provides grants to remove, retrofit, or mitigate transportation infrastructure barriers (like highways or rail lines) that divide communities, often in marginalized urban areas. The program funds planning and capital construction to reconnect neighborhoods (e.g., capping a sunken freeway, building a pedestrian land bridge). Unobligated funds were rescinded by the OBBBA. (US Department of Transportation 2025b)

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Program	Funding Level	Purpose/Details
Infrastructure Investment and Jobs Act (cont'd)		
Bridge Investment Program	\$12.5 billion	Department of Transportation program that provides grants to repair or replace bridges critical to commerce. The program aims to improve safety, reliability, and connectivity. (Federal Highway Administration 2025a)
Rebuilding American Infrastructure with Sustainability and Equity Grants	\$7.5 billion	Department of Transportation program that supports planning or capital investments in surface-transportation projects that advance priorities including safety, environmental sustainability, quality of life, mobility and community connectivity, economic competitiveness and opportunity, state of good repair, partnership and collaboration, and innovation. The Trump administration has renamed it the Better Utilizing Investments to Leverage Development program, removing sustainability and equity from the program's scope. (Local Infrastructure Hub 2025; Tubbs 2025)
National Electric Vehicle Infrastructure Formula Program	\$5 billion	Supports build-out of EV charging stations along highways to enable long-distance EV travel and more widespread EV adoption. Each state receives funding to install high-speed chargers along major routes. (US Department of Energy 2025g)
Charging and Fueling Infrastructure Discretionary Grant Program	\$2.5 billion	Grants for EV charging and alternative fueling infrastructure in community locations (e.g., downtowns, parks, schools) and off-highway corridors. The program focuses on improving access in disadvantaged and underserved communities. (US Department of Transportation 2025a)
Regional Direct Air Capture Hubs	\$3.5 billion	Creates four hubs to demonstrate carbon dioxide DAC technologies. The program includes grants for technology deployment and associated storage or use of the captured carbon dioxide. (US Department of Energy 2025i)
Carbon Dioxide Transportation Infrastructure Finance and Innovation Program	\$2.1 billion authorized/ ~\$600 million appropriated	Loans and grants for shared carbon dioxide transportation infrastructure (pipelines, hubs) to support CCS and DAC projects. The goals are to facilitate carbon dioxide pipeline networks and regional carbon management strategies. (US Department of Energy 2025c)

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Program	Funding Level	Purpose/Details
Inflation Reduction Act		
Greenhouse Gas Reduction Fund	\$27 billion	An EPA program that awarded \$20 billion to national nonprofit green finance institutions and five regional ones, plus \$7 billion to state/local institutions to support residential solar, efficiency, and other climate projects in low-income communities. The OBBBA rescinded the authority for GGRF, and litigation is ongoing related to the Trump administration’s attempts to terminate allocated funding. (US Environmental Protection Agency 2023, 2025c; Spring 2025)
Environmental and Climate Justice Block Grants	\$2.8 billion	Grants to community-driven initiatives that support activities that address climate or pollution risks while supporting workforce development and disadvantaged communities. The Trump administration froze the funding for these grants (related litigation is ongoing), and OBBBA rescinded any unobligated funding. (Brown 2025; Columbia Law School 2025)
Neighborhood Access and Equity Grants	\$3 billion	Grants for projects that improve walkability, safety, and affordable transportation in disadvantaged communities. Projects include transit expansion to trails to transportation pollution mitigation. The Department of Transportation combined the program with IIJA’s “Reconnecting Communities.” The OBBBA rescinded over half of the funding allocated to the program. (Funk 2023; Parlapiano et al. 2025)
Climate-Smart agricultural conservation programs	Over \$20 billion	Funds to support agricultural practices and forest management that reduce greenhouse gas emissions and enhance carbon sequestration, including for the Environmental Quality Incentives Program, the Conservation Stewardship Program, the Agricultural Conservation Easement Program, and the Regional Conservation Partnership Program. The OBBA rescinded unobligated funds for the programs. (Columbia Law School et al. 2025)
Industrial Demonstrations Program	\$6 billion	A program that funds projects that reduce emissions in energy-intensive industries. The Department of Energy awarded \$6 billion (with funding from IRA and IIJA) to 33 projects aimed at decarbonizing sectors including cement, steel, and chemicals, fostering economic development in industrial regions. In May 2025 DOE announced the termination of \$3.7 billion of clean energy projects, many of which were funded by the Industrial Demonstrations Program. (US Department of Energy 2025e, 2025j)

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Program	Funding Level	Purpose/Details
Inflation Reduction Act (cont'd)		
Transmission Siting and Economic Development Program	\$760 million	Grants to subnational governments to support the development of interstate or offshore high-voltage transmission lines. In addition to funding related to the transmission projects, funding could be used for economic development activities for communities that may be affected by the construction and operation of the project. In July 2024, DOE announced \$371 million in funding to 20 projects across 16 states. The OBBBA rescinded the program’s unobligated funds. (Columbia Law School and Columbia Climate School 2025).



Appendix B: Methodology Related to Federal Funding and Economic Analyses

Funding

The analysis of federal funding in this report uses award-level funding data from the website USASpending.gov, the official open data source of federal spending information. The data was extracted through the USA Spending Application Programming Interface.

In constructing the panel series, data was filtered to include “prime award obligations,” which are legally binding commitments to future spending, categorized as follows:

- Contracts (federal procurement of goods and services),
- Grants (direct federal support for authorized purposes),
- Direct payments (to individuals or entities for specific purposes), and
- Other financial assistance (non-loan disbursements not captured above).

The analysis excludes the following:

- Loans,
- Insurance and guarantees, and
- Account-level federal operational spending, such as federal employee salaries and intragovernmental transfers.

The funding metric analyzed is the total obligated amount, representing the sum of all legal obligations associated with a prime award. This amount provides a comprehensive view of the federal commitment to nonfederal recipients. The analysis focuses on obligations because staff at the Department of Commerce conveyed to the author, via phone conversations and email exchanges throughout 2024, that data on annual outlays/disbursements is unreliable for the purpose of this analysis.

The time period for the analysis spans fiscal years 2019–2024 (October 2018 to September 2024), using the action date fiscal year, which denotes when the government obligation was formalized

(contract signed). Data prior to 2019 were not sufficiently reliable.

For geographic granularity, the analysis relies on the “place of performance” metric, which is the county or state where the primary performance of the awarded contract or grant occurs. This differs from the address of the recipient, which is often not where most of the funding will be used.

The following metrics were extracted:

- Total obligated amount
- Action date fiscal year
- Place of performance (county and state)
- Funding agency and subagency name
- Place of performance county Federal Information Processing Standards (FIPS) code (a unique identifier of US counties)

Then, the following steps were taken before analyzing the data:

- Multiple files from the downloaded data were concatenated into a single dataset.
- Duplicate records were identified and removed.
- Separate records for the same unique award were added together to produce a total obligated amount for each unique award.

An initial review of the data led to the following changes:

- The lower 48 states are included, while Alaska, Hawaii and Washington, DC, as well as territories are excluded due to data limitations and inconsistencies.
- Counties in which the state capital cities are located were excluded because funding to these counties is too often intended for activities throughout the whole state (in theory, place of performance can be coded as a county or state, which should resolve this problem, but in practice there are too many errors involving counties that contain state capitals). Also eliminated was an outlier award of \$6.9 billion from the EPA to Montgomery County, Maryland, which was a grant to the Climate United Fund to be distributed to counties throughout the country.
- Oglala Lakota County in South Dakota was eliminated due to a recent change to the county name that affected reporting.

Despite these limitations, USASpending.gov is the only publicly available source with sufficient detail

for this analysis. The dataset covers roughly 99 percent of the counties in the lower 48 US states.

Economic Performance

Annual county-level data for gross domestic product, personal income, and population is downloaded from the website of the US Bureau of Economic Analysis (BEA).

The FIPS ID is used to link county-level economic data with the county-level categorizations of fossil fuel infrastructure from Kaufman et al. (2024) and Raimi et al. (2022). Two major issues arose with combining these datasets:

- Virginia has “independent cities” that are considered county equivalents. However, BEA reports data for the combination of these independent cities and contiguous counties. The county-level fossil fuel categorizations were manually adjusted to ensure the geographic scope of the funding data matches the BEA data.
- In 2022 BEA stopped reporting county-level data for Connecticut, instead reporting data for “planning regions,” without a clear crosswalk. Connecticut counties were therefore excluded from the economic analysis.

Some caution is warranted in interpreting results. BEA’s smoothing and imputation methods rely on state-level controls, which may dampen volatility. However, BEA applies these methods consistently across all counties, so their effects on the category comparisons are unclear.

References

- Appalachian Regional Commission. 2024. *Status of the Appalachian Development Highway System as of September 30, 2024*. <https://www.arc.gov/wp-content/uploads/2024/12/FY-2024-ADHS-Status-Report.pdf>.
- Appalachian Regional Commission. 2025. “Budget, Performance and Policy.” *Appalachian Regional Commission*. <https://www.arc.gov/budget-performance-and-policy/>.
- Ashenfarb, Matthew. 2025. “A Place-Based Clean Electricity Subsidy and Its Effect on Emissions.” SSRN Scholarly Paper 4997027. Social Science Research Network, May 9. <https://doi.org/10.2139/ssrn.4997027>.
- Austin, Benjamin A., Edward L. Glaeser, and Lawrence H. Summers. 2018. *Jobs for the Heartland: Place-Based Policies in 21st Century America*. National Bureau of Economic Research. <https://www.nber.org/papers/w24548>.
- Autor, David, David Dorn, and Gordon H. Hanson. 2021. “On the Persistence of the China Shock.” In *IZA Discussion Papers*, 14804. IZA Discussion Papers. Institute of Labor Economics (IZA). <https://ideas.repec.org/p/iza/izadps/dp14804.html>.
- Barnes, Chelsea. 2021. “What the Bipartisan Infrastructure Bill Means for Appalachia.” *Appalachian Voices*, August 17. <https://appvoices.org/2021/08/17/infrastructure-bill-appalachia/>.
- Bartik, Timothy J. 2020. “Using Place-Based Jobs Policies to Help Distressed Communities.” *Journal of Economic Perspectives* 34 (3): 99–127. <https://doi.org/10.1257/jep.34.3.99>.
- Bowlin, Nick. 2025. “Trump Halts Historic Orphaned Well-Plugging Program.” *High Country News*, March 27. <https://www.hcn.org/articles/trump-halts-historic-orphaned-well-plugging-program/>.
- Brown, Claire. 2025. “E.P.A. Grant Recipients Find Their Funds Frozen, With No Explanation.” *Climate. The New York Times*, March 11. <https://www.nytimes.com/2025/03/11/climate/epa-grant-recipients-funding-freeze.html>.
- Center on Global Energy Policy. 2025. “Assessing the Energy Impacts of the One Big Beautiful Bill Act.” *Center on Global Energy Policy at Columbia University SIPA | CGEP*, July 14. <https://www.energypolicy.columbia.edu/assessing-the-energy-impacts-of-the-one-big-beautiful-bill-act/>.
- Clarke, Leon, Mark Curtis, Ann Eisenberg, Emily Grubert et al. 2024. “A Research Agenda for Economic Resilience in Fossil Fuel–Dependent Communities.” *Environmental Research: Energy*,



ahead of print. <https://doi.org/10.1088/2753-3751/ad6d70>.

Columbia Law School. 2025. “IRA Section 60201 – Environmental and Climate Justice Block Grants.” *Inflation Reduction Act Tracker*. <https://iratracker.org/programs/ira-section-60201-environmental-and-climate-justice-block-grants/>.

Columbia Law School, and Columbia Climate School. 2025. “IRA Section 50152 – Grants to Facilitate the Siting of Interstate Electricity Transmission Lines.” *Inflation Reduction Act Tracker*. <https://iratracker.org/programs/ira-section-50152-grants-to-facilitate-the-siting-of-interstate-electricity-transmission-lines/>.

Columbia Law School, Columbia Climate School, and Environmental Defense Fund. 2025. “IRA Section 21001 – Climate Smart Agricultural Conservation Investments.” *Inflation Reduction Act Tracker*. <https://iratracker.org/programs/ira-section-21001-climate-smart-agricultural-conservation-investments/>.

Columbia Law School’s Sabin Center for Climate Change Law, and Environmental Defense Fund. 2025. “Inflation Reduction Act Tracker.” *Inflation Reduction Act Tracker*. <https://iratracker.org/>.

Congressional Research Service. 2025. “Economic Development Administration: An Overview of Programs and Appropriations (FY2011–FY2025).” Legislation. May. <https://www.congress.gov/crs-product/R46991>.

Dalbey, Matthew, and Daniel Raimi. 2024. “Meet Them Where They Are: Lessons Learned from the Federal Interagency Working Group on Energy Communities.” Resources for the Future, November 4. <https://www.rff.org/publications/reports/meet-them-where-they-are-lessons-learned-from-the-federal-interagency-working-group-on-energy-communities/>.

Duff, Kyle. 2024. “NREL Technical Assistance Advances Community Clean Energy Goals Through Communities LEAP Pilot.” NREL, December 12. <https://www.nrel.gov/news/detail/program/2024/nrel-technical-assistance-advances-community-clean-energy-goals-through-communities-leap-pilot>.

Federal Highway Administration. 2025a. “Bridge Investment Program.” <https://www.fhwa.dot.gov/bridge/bip/>.

Federal Highway Administration. 2025b. “Infrastructure Investment and Jobs Act – Rural Surface Transportation Grant Program Fact Sheet.” https://www.fhwa.dot.gov/infrastructure-investment-and-jobs-act/rural_surface.cfm.

Feldgus, Steven, and Joan Mooney. 2024. “Addressing Legacy Pollution by Reclaiming Abandoned Mine Lands and Remediating Orphaned Wells.” US Department of the Interior. <https://assets>.

performance.gov/APG/files/FY2024/Q3/FY2024_Q3_DOI_Progress_Addressing_Legacy_Pollution_by_Reclaiming_Abandoned_Mine_Lands_and_Remediating_Orphaned_Wells.pdf.

Funk, Kyle. 2023. “New Federal Neighborhood Access and Equity Grants: Guidance for Local Leaders.” *National League of Cities*, May 4. <https://www.nlc.org/article/2023/05/04/new-federal-neighborhood-access-and-equity-grants-guidance-for-local-leaders/>.

Furnaro, Andrea, Herpich Philipp, Brauers Hanna, Oei Pao-Yu, Kemfert Claudia, and Look Wesley. 2021. *German Just Transition: A Review of Public Policies to Assist German Coal Communities in Transition*. Resources for the Future Repoert 21-13. <https://www.rff.org/publications/reports/german-just-transition-a-review-of-public-policies-to-assist-german-coal-communities-in-transition/>.

Houghtalen, Natalie. 2022. “Recommendations for Implementing a Regional Clean Hydrogen Hub Program.” Clearpath, January. <https://clearpath.org/wp-content/uploads/sites/44/2022/01/iija-h2-hubs-recommendations-memo.pdf>.

House Committee on Appropriations – Republicans. 2025. “Committee Releases FY26 Agriculture, Rural Development, FDA Bill.” June 4. <http://appropriations.house.gov/news/press-releases/committee-releases-fy26-agriculture-rural-development-fda-bill>.

Howland, Ethan. 2025. “DOE Cancels \$3.7B in Carbon Capture, Decarbonization Awards.” *Utility Dive*, May 30. <https://www.utilitydive.com/news/doe-cancel-carbon-capture-decarbonization-awards-grants/749409/>.

Ingram, Elizabeth. 2024. “OCED Funds Awarded to Advance Lewis Ridge Pumped Storage Planning.” *Power Engineering*, September 30. <https://www.power-eng.com/renewables/hydropower/oced-funds-awarded-to-advance-lewis-ridge-pumped-storage-planning/>.

Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization. 2024. *Advancing Economic Diversification in America’s Energy Communities: Energy Communities IWG Progress Report*. <https://www.ourenergypolicy.org/resources/advancing-economic-diversification-in-americas-energy-communities-energy-communities-iwg-progress-report/>.

Jenkins, Maeve Allsup, Lisa Martine. 2025. “There’s a Second DOE Project Cancellation List.” *Latitude Media*, October 7. <https://www.latitudemedia.com/news/theres-a-second-doe-project-cancellation-list/>.

Kaufman, Dr Noah, Ariane Desrosiers, and Sarah Doctor. 2024. “Economic Performance in US Fossil Fuel Communities.” *Center on Global Energy Policy at Columbia University SIPA*.



- Laity, Edward. 2025. “US DOE Awards Initial Funding to Final Two Hydrogen Hubs Totalling \$38.8m.” H2 View, January 21. <https://www.h2-view.com/story/us-doe-awards-initial-funding-to-final-two-hydrogen-hubs-totalling-38-8m/2120025.article/>.
- Lawhorn, Julie. 2024. “The POWER Initiative: Energy Transition as Economic Development.” Congressional Research Services, December 4. <https://www.congress.gov/crs-product/R46015>.
- Local Infrastructure Hub. 2025. “Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program Fact Sheet 2024.” November 26. <https://localinfrastructure.org/wp-content/uploads/2024/06/Rebuilding-American-Infrastructure-with-Sustainability-and-Equity-RAISE-Grant-Program-Fact-Sheet-2024.pdf>.
- McCann, Phillip. 2023. “Place–Based Policies for the Future.” OECD, April 13. https://www.oecd.org/en/publications/place-based-policies-for-the-future_9b0b0107-en.html.
- McDonald, Taite R. 2025. “How the One Big Beautiful Bill Act Reshapes DOE Loan Programs.” Holland & Knight, August 15. <https://www.hklaw.com/en/insights/publications/2025/08/how-the-one-big-beautiful-bill-act-reshapes-doe-loan-programs>.
- Mendoza, Katya. 2024. “Federal Government Allocates \$475 Million for Clean Energy Projects on Mine Lands Nationwide.” Arizona Public Media, March 21. <https://news.azpm.org/p/weather/2024/3/21/219553-federal-government-allocates-475-million-for-clean-energy-projects-on-mine-lands-nationwide/>.
- Morgan Lewis. 2024. “DOE Initial Funding Awards to Two More Regional Hydrogen Hubs Supports Hydrogen Infrastructure Expansion.” Morgan Lewis. <https://www.morganlewis.com/blogs/powerandpipes/2024/12/doe-initial-funding-awards-to-two-more-regional-hydrogen-hubs-supports-hydrogen-infrastructure-expansion>.
- National Renewable Energy Laboratory. 2025. “Clean Energy on Mine Land Technical Assistance | State, Local, and Tribal Governments.” December 1. <https://www.nrel.gov/state-local-tribal/ceml-technical-assistance>.
- National Science Foundation. 2025. “Regional Innovation Engines.” <https://www.nsf.gov/funding/initiatives/regional-innovation-engines>.
- Osborne, James. 2025. “Exxon’s Clean Hydrogen Project Hit by Trump Budget Cuts.” *Houston Chronicle*, May 30. <https://www.houstonchronicle.com/politics/article/clean-hydrogen-exxon-trump-cuts-20353167.php>.
- Panel on Policies and Priorities for Metropolitan and Nonmetropolitan Areas. 1980. *Urban America*

in the Eighties: Perspectives and Prospects: Report. President’s Commission for a National Agenda for the Eighties. <https://www.amazon.com/Urban-America-eighties-Perspectives-prospects/dp/B003U5V67I>.

Parlapiano, Alicia, Margot Sanger-Katz, Aatish Bhatia, Josh Katz The reporters reviewed the hundreds of items in the bill, and their corresponding C. B. O. scores. 2025. “Everything in Trump’s Big Tax and Spending Law, and How Much It Will Cost or Save.” The Upshot. *The New York Times*, June 30. <https://www.nytimes.com/interactive/2025/06/30/upshot/senate-republican-megabill.html>.

Raimi, Daniel, Sanya Carley, and David Konisky. 2022. “Mapping County-Level Vulnerability to the Energy Transition in US Fossil Fuel Communities.” *Scientific Reports* 12 (1): 1. <https://doi.org/10.1038/s41598-022-19927-6>.

Raimi, Daniel, Noah Kaufman, Sarah Doctor, and Zachary Whitlock. 2025. “Booming and Busting: The Mixed Fortunes of US Oil and Gas–Producing Regions.” *Resources for the Future*. <https://www.rff.org/publications/issue-briefs/booming-and-busting-the-mixed-fortunes-of-us-oil-and-gasproducing-regions/>.

Rubin, Debra. 2024. “Three US Hydrogen Hubs Gain First Tranche of DOE Funding Millions.” *Engineering News–Record*, August 28. <https://www.enr.com/articles/59192-three-us-hydrogen-hubs-gain-first-tranche-of-doe-funding-millions>.

Seel, Joachim, Mel Moyce, and Sydney Forrester. 2024. “A Clean Energy Deployment Baseline for the Energy Community and Low-Income Tax Credit Bonuses | Energy Markets & Policy.” Berkeley Lab Energy Markets & Policy, December. <https://emp.lbl.gov/publications/clean-energy-deployment-baseline>.

Somasundaram, Praveena. 2025. “Trump Administration Must Unfreeze Billions in Climate Funding, Judge Rules.” *The Washington Post*, April 16. <https://www.washingtonpost.com/climate-environment/2025/04/15/trump-climate-infrastructure-funding-lawsuit/>.

Spring, Jake. 2025. “Trump EPA Plans to Claw Back \$7 Billion in Rooftop Solar Grants.” *The Washington Post*, August 5. <https://www.washingtonpost.com/climate-environment/2025/08/05/rooftop-solar-grants-epa/>.

Tebben, Susan. 2025. “Appalachian Regional Commission Funding Restored in Congressional Committee.” *News From The States*, July 29. <https://www.newsfromthestates.com/article/appalachian-regional-commission-funding-restored-congressional-committee>.

The White House. 2023. “Biden–Harris Administration Announces Regional Clean Hydrogen Hubs



to Drive Clean Manufacturing and Jobs.” *The White House*, October 13. <https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/10/13/biden-harris-administration-announces-regional-clean-hydrogen-hubs-to-drive-clean-manufacturing-and-jobs/>.

The White House. 2024. “Remarks by National Economic Advisor Lael Brainard on Place-Based Growth: Helping Communities Making a Comeback.” *The White House*, January 22. <https://bidenwhitehouse.archives.gov/briefing-room/speeches-remarks/2024/01/22/remarks-by-national-economic-advisor-lael-brainard-on-place-based-growth-helping-communities-making-a-comeback/>.

The White House. 2025. “Executive Order on Helping Left-Behind Communities Make a Comeback.” *The White House*, January 19. <https://bidenwhitehouse.archives.gov/briefing-room/presidential-actions/2025/01/19/executive-order-on-helping-left-behind-communities-make-a-comeback/>.

Tubbs, Sean. 2025. “RAISE No More; Trump Administration Changes Grant Program Name to BUILD.” *Information Charlottesville*, February 4. <https://infocville.com/2025/02/04/raise-no-more-trump-administration-changes-grant-program-name-to-build/>.

US Government Accountability. 2023. “American Rescue Plan Act: Implementation of Economic Development, Environment, and Wildlife Provisions | U.S. GAO.” <https://www.gao.gov/products/gao-23-105795>.

US Department of Energy. 2024a. “2024 OCED Carbon Capture Pilot at Cane Run Briefing.Pdf.” February 21. https://www.energy.gov/sites/default/files/2024-02/2024%20OCED%20Carbon%20Capture%20Pilot%20at%20Cane%20Run%20Briefing.pdf?utm_source=chatgpt.com.

US Department of Energy. 2024b. “Advanced Energy Manufacturing and Recycling Grants.” *Energy.Gov*, June 26. <https://www.energy.gov/mesc/advanced-energy-manufacturing-and-recycling-grants>.

US Department of Energy. 2024c. “Biden–Harris Administration Announces Nearly \$430 Million to Accelerate Domestic Clean Energy Manufacturing in Former Coal Communities.” *Energy.Gov*, October 22. <https://www.energy.gov/articles/biden-harris-administration-announces-nearly-430-million-accelerate-domestic-clean-energy>.

US Department of Energy. 2025a. “Carbon Capture Demonstration Projects Program.” *Energy.Gov*. <https://www.energy.gov/oced/CCdemos>.

US Department of Energy. 2025b. “Carbon Capture Large–Scale Pilot Projects.” *Energy.Gov*. <https://www.energy.gov/oced/CCpilots>.



US Department of Energy. 2025c. “Carbon Dioxide Transportation Infrastructure Finance and Innovation Program.” Energy.Gov. <https://www.energy.gov/lpo/carbon-dioxide-transportation-infrastructure-finance-and-innovation-program>.

US Department of Energy. 2025d. “Energy Infrastructure Reinvestment Financing.” Energy.Gov. <https://www.energy.gov/lpo/energy-infrastructure-reinvestment-financing>.

US Department of Energy. 2025e. “Industrial Demonstrations Program.” Energy.Gov. <https://www.energy.gov/oced/industrial-demonstrations-program-0>.

US Department of Energy. 2025f. “LPO Year in Review 2024.” Energy.Gov, January 21. <https://www.energy.gov/lpo/articles/lpo-year-review-2024>.

US Department of Energy. 2025g. “National Electric Vehicle Infrastructure (NEVI) Formula Program.” <https://afdc.energy.gov/laws/12744>.

US Department of Energy. 2025h. “Qualifying Advanced Energy Project Credit (48C) Program.” Energy.Gov. <https://www.energy.gov/infrastructure/qualifying-advanced-energy-project-credit-48c-program>.

US Department of Energy. 2025i. “Regional Direct Air Capture Hubs.” Energy.Gov. <https://www.energy.gov/oced/DACHubs>.

US Department of Energy. 2025j. “Secretary Wright Announces Termination of 24 Projects, Generating Over \$3 Billion in Taxpayer Savings.” Energy.Gov, May 30. <https://www.energy.gov/articles/secretary-wright-announces-termination-24-projects-generating-over-3-billion-taxpayer>.

US Department of the Interior. 2020. “Fiscal Year 2021 | U.S. Department of the Interior.” Site page. February 6. <https://www.doi.gov/budget/appropriations/2021>.

US Department of the Interior. 2023. “Orphaned Wells.” Landing Page. June 5. <https://www.doi.gov/orphanedwells>.

US Department of the Interior. 2024a. “Fiscal Year 2025 | U.S. Department of the Interior.” Site page. March 11. <https://www.doi.gov/budget/appropriations/2025>.

US Department of the Interior. 2024b. “OSMRE Budget | U.S. Department of the Interior.” Site page. May 24. <https://www.doi.gov/ocl/osmre-budget>.

US Department of the Interior. 2025. “Interior Announces Nearly \$725 Million to Reclaim Abandoned Coal Mines.” Press Release. June 27. <https://www.doi.gov/pressreleases/interior-announces-nearly->



[725-million-reclaim-abandoned-coal-mines.](#)

US Department of the Interior, Office of Surface Mining Reclamation and Enforcement. 2025. “Reclaiming Abandoned Mine Lands.” [https://www.osmre.gov/programs/reclaiming-abandoned-mine-lands.](https://www.osmre.gov/programs/reclaiming-abandoned-mine-lands)

US Department of the Treasury. 2025a. “State and Local Fiscal Recovery Funds.” U.S. Department of the Treasury, February 8. [https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/state-and-local-fiscal-recovery-funds.](https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/state-and-local-fiscal-recovery-funds)

US Department of the Treasury. 2025b. “U.S. Department of the Treasury and IRS Announce \$6 Billion in Tax Credit Allocations for the Second Round of the § 48C Qualifying Advanced Energy Project Tax Credit.” U.S. Department of the Treasury, February 8. [https://home.treasury.gov/news/press-releases/jy2779.](https://home.treasury.gov/news/press-releases/jy2779)

US Department of Transportation. 2025a. “Charging and Fueling Infrastructure Grant Program.” [https://www.transportation.gov/rural/grant-toolkit/charging-and-fueling-infrastructure-grant-program.](https://www.transportation.gov/rural/grant-toolkit/charging-and-fueling-infrastructure-grant-program)

US Department of Transportation. 2025b. “Reconnecting Communities Pilot (RCP) Grant Program.” [https://www.transportation.gov/reconnecting.](https://www.transportation.gov/reconnecting)

US Economic Development Administration. 2025a. *American Rescue Plan: COAL COMMUNITIES COMMITMENT FACT SHEET*. [https://www.eda.gov/sites/default/files/2022-10/EDA-Coal-Communities-Commitment-Fact-Sheet.pdf#:~:text=As%20a%20result%20of%20robust,Communities%20Commitment%20both%20supports%20critical.](https://www.eda.gov/sites/default/files/2022-10/EDA-Coal-Communities-Commitment-Fact-Sheet.pdf#:~:text=As%20a%20result%20of%20robust,Communities%20Commitment%20both%20supports%20critical)

US Economic Development Administration. 2025b. “American Rescue Plan: Partnering with America’s Communities to Build Back Better.” [https://www.eda.gov/funding/programs/american-rescue-plan?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=.](https://www.eda.gov/funding/programs/american-rescue-plan?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=)

US Economic Development Administration. 2025a. “Coal Communities Commitment: DIVERSIFYING COAL COMMUNITIES FOR A RESILIENT FUTURE.” [https://www.eda.gov/funding/programs/american-rescue-plan/coal-communities-commitment.](https://www.eda.gov/funding/programs/american-rescue-plan/coal-communities-commitment)

US Economic Development Administration. 2025b. “Distressed Area Recompete Pilot Program (Recompete).” [https://www.eda.gov/funding/programs/recompete-pilot-program.](https://www.eda.gov/funding/programs/recompete-pilot-program)

US Economic Development Administration. 2025c. “Economic Adjustment Assistance.” [https://www.eda.gov/funding/programs/american-rescue-plan/economic-adjustment-assistance.](https://www.eda.gov/funding/programs/american-rescue-plan/economic-adjustment-assistance)



US Economic Development Administration. 2025d. “Good Jobs Challenge.” <https://www.eda.gov/funding/programs/good-jobs-challenge>.

US Economic Development Administration. 2025e. “Indigenous Communities | U.S. Economic Development Administration.” <https://www.eda.gov/funding/programs/american-rescue-plan/indigenous-communities>.

US Economic Development Administration. 2025f. “Regional Technology and Innovation Hubs (Tech Hubs).” <https://www.eda.gov/funding/programs/regional-technology-and-innovation-hubs>.

US Economic Development Administration. 2025g. “Travel, Tourism and Outdoor Recreation.” <https://www.eda.gov/funding/programs/american-rescue-plan/travel-tourism-and-outdoor-recreation>.

US Environmental Protection Agency. 2022. “Infrastructure Investment and Jobs Act: A Historic Investment in Brownfields.” Announcements and Schedules. February 22. <https://www.epa.gov/brownfields/infrastructure-investment-and-jobs-act-historic-investment-brownfields>.

US Environmental Protection Agency. 2023. “Greenhouse Gas Reduction Fund.” Collections and Lists. February 1. <https://www.epa.gov/greenhouse-gas-reduction-fund>.

US Environmental Protection Agency. 2025a. “Brownfield Overview and Definition.” Overviews and Factsheets. <https://19january2017snapshot.epa.gov/brownfields/brownfield-overview-and-definition>.

US Environmental Protection Agency. 2025b. “FY 2026 Budget.” Data and Tools. <https://www.epa.gov/planandbudget/cj>.

US Environmental Protection Agency. 2025c. “Greenhouse Gas Reduction Fund.” Overviews and Factsheets. September 23. <https://www.epa.gov/aboutepa/greenhouse-gas-reduction-fund>.

White House. 2025. “FACT SHEET: The Biden–Harris Administration Cements Legacy of Helping Left-Behind Communities Make a Comeback | The American Presidency Project.” January 19. <https://www.presidency.ucsb.edu/documents/fact-sheet-the-biden-harris-administration-cements-legacy-helping-left-behind-communities>.

Wolman, Harold, Howard Wial, Travis St Clair, and Edward Hill. 2017. *Coping with Adversity: Regional Economic Resilience and Public Policy*. Cornell University Press. <https://www.amazon.com/Coping-Adversity-Regional-Economic-Resilience/dp/0801478545>.



Notes

1. Table A1 lists programs that specifically target fossil fuel–reliant places, and Table A2 outlines broader place-based programs that are well suited to benefit these communities.
2. While this study focuses on programs funded via new federal legislation, federal agencies in the early 2020s also increased funding for preexisting programs that support fossil fuel–reliant communities, including the Department of the Interior’s Abandoned Mine Land Economic Revitalization (AMLER) program, the Community Economic Development grant program run by the Department of Health and Human Services, and various Department of Labor initiatives designed to support dislocated coal industry workers.
3. From the Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization list, the author excludes the Department of Health and Human Services and the Federal Communications Commission because their contributions are small compared to their core functions.
4. While the IIJA included a carve-out of roughly \$100 million per year for the Appalachian Highway Development System, it did not receive any grants in FY2024, according to the Appalachian Regional Commission (2024).
5. Importantly, national averages mask substantial regional variation. Using this dataset, Raimi et al. (2025) demonstrate that local economies in oil and gas regions with booming production have significantly outperformed in recent decades, while those with declining production have underperformed.



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