

An aerial photograph of a city skyline, likely Pittsburgh, featuring a river, a highway with traffic, and various skyscrapers. The image is overlaid with a blue gradient and white text.

THE FUTURE OF PLACE-BASED ECONOMIC POLICY:

EARLY INSIGHTS FROM
THE BUILD BACK BETTER
REGIONAL CHALLENGE

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Executive Summary

As the nation seeks to rebuild in the wake of the COVID-19 pandemic, federal policymakers are increasingly recognizing that bottom-up solutions are a critical path for spurring economic recovery, mitigating climate change, establishing supply chains in critical technologies, and addressing geographic inequities.

This is the central premise of place-based economic policies like the \$1 billion Build Back Better Regional Challenge (BBBRC)—a challenge grant administered by the Economic Development Administration (EDA) in the

U.S. Department of Commerce. As the EDA's signature American Rescue Plan Act (ARPA) recovery program, the BBBRC provides five-year grants ranging from \$25 million to \$65 million across 21 regions competitively selected from a pool of 60 finalists. With these resources, coalitions of businesses, governments, universities, and community-based organizations will implement comprehensive strategies to develop nationally critical industry clusters in ways that deliver economic opportunity to traditionally underserved people and communities.

In these ways, the BBBRC represents an important advancement in federal place-based economic policies—a school of policymaking that seeks to benefit people and economies by explicitly targeting geographies of concern. In that context, this report—the first in an applied research partnership between Brookings Metro and the EDA—provides early observations for policymakers, practitioners, and other stakeholders on the program’s design and selection phase. We find that:

Through large-scale, flexible funding, the BBBRC accelerated path-breaking regional economic development planning and coalition-building—a process that significantly strained the capacity of the 60 finalists.

The EDA structured the BBBRC in two phases. In Phase 1, 529 regional coalitions submitted short proposals outlining a high-level vision, strategy, and coalition for their industry cluster. In Phase 2, 60 regional coalitions received \$500,000 technical assistance grants to develop their proposals into full-fledged strategies—condensing into weeks what typically takes months or even years. This outpouring of interest illustrates the power of the “jump-ball” funding effect: how competitive federal programs can not only align regional leaders around a shared vision, but also inspire tremendous effort among those coalitions to develop comprehensive plans under ambitious deadlines. This process accelerated widespread impact, but significantly strained the capacity of regional applicants. To support regions through this planning sprint, the EDA created a multipronged technical assistance strategy involving multiple external partners.

Across the 60 finalists, the BBBRC supported three different types of cluster-based economic development initiatives—maximizing the program’s relevance across urban, rural, and tribal communities.

Given the program’s focus on cluster-based economic development, the EDA asked applicants to explain their chosen cluster’s opportunities, its constraints, and its potential impact. Understanding “cluster maturity”—where a region’s cluster resides in the maturity lifecycle—was foundational to framing the cluster’s opportunities and constraints. Across the 60 finalists, we identified a three-part cluster typology consisting of:

1. **Contenders:** Twenty-two coalitions focused on emerging clusters, contending that they could use federal investment to accelerate low-maturity clusters (often in the energy space) into growing and established clusters.
2. **Extenders:** Twenty-one coalitions focused on established clusters, often in advanced manufacturing, biotechnology, and information technology. Because these clusters are mature but not yet distressed, these coalitions’ objective was to extend the reach of the cluster’s assets in ways that enhance competitiveness and benefit more people and businesses within the region.
3. **Reinventors:** The remaining 17 coalitions focused on declining clusters. These high-maturity clusters (often in agriculture and natural resources) have been under competitive threat for decades, and coalitions are now seeking federal resources to reinvigorate them.

The BBBRC required applicants to create a coherent portfolio of proposed interventions, but left it to them to determine which specific projects would best advance their clusters.

Creating one-size-fits-all federal programs ignores the significant variation across local economies. The BBBRC’s designers recognized that cluster-based economic development requires multiple investments in several critical elements of economic competitiveness: talent development, research and commercialization, infrastructure and placemaking, entrepreneurship, and governance. Yet the BBBRC allowed regional coalitions considerable flexibility when designing interventions, which is reflected in the considerable variation in project portfolios across contenders, extenders, and reinventors.

Nearly 30% of total requested funding came from non-federal sources, including local and state governments, industry partners, and philanthropy.

The EDA encouraged matching resources from several sources: lead applicants, local governments, state governments, and other sources (e.g., industry, philanthropy, etc.). Across all 60 Phase 2 applications, federal resources accounted for approximately 71% of the total requested funding.

Applicants themselves accounted for another 13% of funds, followed by state governments (6%), other sources (6%), and local governments (4%).

The BBBRC yielded three proposed cluster governance models, reflecting the diversity of institutions that co-govern local communities.

There was significant variation in how BBBRC coalitions organized themselves, divided up projects, and distributed funding. At one end of the spectrum, there were coalitions in which the lead organization was allocated more than half of the total budget request. Of the 22 coalitions deploying this centralized governance model, half were led by research universities. At the other end of the spectrum are facilitative governance models, in which the lead organization was allocated less than 25% of the coalition's total budget request. More than half of these 27 coalitions were led by industry intermediaries (16). Finally, another 11 coalitions operated shared governance models, in which the lead organization manages between 25% and 50% of the project portfolio. Among the 21 awardees, a range of institution types served as the coalition lead, including universities, regional economic development groups, community-based organizations, local governments, state governments, and philanthropies.

BBBRC coalitions will measure their impact through a uniquely broad mix of economic

development metrics. Over 90% of coalitions chose to track metrics related to markets and business networks, human capital and workforce, economic activity and employment, and engagement and governance in at least one component project within their portfolio. Less commonly, coalitions included production and business capacity metrics (82%), financing and investment metrics (67%), and innovation and commercialization metrics (53%).

The BBBRC's top priority was equity, but finalists had mixed success embedding equity in strategies, governance, and metrics. The EDA encouraged applicants to consider how federal funds would benefit populations that have suffered from historical and systemic discrimination, disinvestment, and disenfranchisement. Many applications referenced intentional efforts to conduct community outreach and engage community-based organizations during planning and implementation phases. In a smaller share of applications, coalitions committed to specific equity-oriented administrative activities within their governance models, such as creating dedicated equity interventions or hiring diversity, equity, and inclusion consultants. But most coalitions struggled to develop comprehensive equity plans that integrated equity into a governance model, articulated each intervention's intended outcomes for historically excluded communities, and developed concrete metrics to track outcomes for these communities over time.



Introduction

As the nation seeks to rebuild in the wake of the COVID-19 pandemic, federal policymakers are increasingly recognizing that supporting bottom-up solutions is a critical path for spurring economic recovery, mitigating climate change, establishing supply chains in critical technologies, and addressing geographic inequities.¹ This is the central premise of place-based economic policies like the \$1 billion Build Back Better Regional Challenge (BBBRC)—a challenge grant administered by the Economic Development Administration (EDA) in the U.S. Department of Commerce. As the EDA’s signature American Rescue Plan Act (ARPA) recovery program, the BBBRC provides five-year grants ranging from \$25 million to \$65 million across 21 competitively selected regions. These investments will support the local development

of nationally critical industries and technologies in ways that deliver economic opportunity to traditionally underserved people and communities.

While the BBBRC is just a small part of the trillions of dollars in recent federal investments to support the economy, it represents a critical test for three key federal policy objectives.

First, at a time of disrupted supply chains, rising global insecurity, and an urgent need to decarbonize the economy, the BBBRC seeks to transform the nation’s technological and industrial capacity in areas such as advanced manufacturing, green technology, agriculture, and health. In April 2022, the Biden administration argued for a new national industrial strategy that

invests in infrastructure, research, technology, and energy as platforms for the next generation of economic growth.² On top of ARP, Congress has provided \$1.5 trillion in new investment via the Infrastructure Investment and Jobs Act, the CHIPS and Science Act, and the Inflation Reduction Act. Amid all this spending, the BBBRC's distinct contribution is its acknowledgement that the nation's industrial capacity derives from what Gary P. Pisano and Willy C. Shih call the "industrial commons"—the place-based concentrations of research institutions, skilled workers, and suppliers that anchor America's most productive clusters.³

Second, at a time of heightened geographic and economic inequality as well as persistent racial inequities, the BBBRC also invests in left-behind people and places to power the nation's industrial and energy transitions. To address national needs, federal investment could easily be directed to the largest and most productive knowledge hubs—circumventing the people long disconnected from the innovation economy in the process. Instead, the BBBRC responds to significant social and geographic divides by helping catalyze, grow, and reinvent existing clusters in ways meant to benefit low-income people and neighborhoods, rural communities, and tribal areas.⁴ In that sense, the program proposes an economic development approach explicitly focused on equity—not just the job and output gains we have long used to define success. But rather than a place-based redistribution program, the BBBRC invests in the talents

and assets of historically undervalued people and places.

Third, as a form of federalism, the program heralds the federal government's embrace of large-scale, place-based challenge grants to spur and support smart local interventions. As such, the program acknowledges that the U.S. economy is really an aggregation of distinct regional economies, each with its own history and opportunities.⁵ What's more, the BBBRC recognizes that the regional networks receiving grants—universities, community-based organizations, local and state governments, and business intermediaries—have a vital role in the nation's economic development.⁶

In sum, the BBBRC represents an important advancement in federal **place-based economic policies**—a school of policymaking that seeks to benefit people and economies by explicitly targeting geographies of concern. With a variety of important stakes and stakeholders, it is a critical test and learning moment for a wide range of regional, state, and federal leaders. In that context, this report—the first installment in an applied research partnership between Brookings Metro and the EDA—provides early observations for policymakers, practitioners, and other stakeholders on the program's design and selection phase. Specifically, the report provides background on the BBBRC; outlines key insights from the competition's design and initial response; and concludes with implications for economic policymakers and practitioners.

Key Terms

Regions include counties in the primary service areas defined by all BBBRC finalists in their Phase 2 applications.

Clusters are groups of businesses that gain a competitive advantage in a region through local proximity and independence.

Coalitions are groups of universities or colleges, nonprofit organizations, governments, private industry, and philanthropies that have jointly applied for BBBRC funding and will collaboratively plan, execute, and govern the application's component projects.

Coalition leads are the university or college, nonprofit organization, government, private industry firm, or philanthropy responsible for coordinating coalition members across component projects.

Component projects are the individual projects contained within each coalition's strategic portfolio that are aligned around a set of cluster interventions and contribute to the coalition's broader economic development strategy.

Regional economic competitiveness officers (RECOs) are individuals appointed by coalitions during Phase 2 of the application process who are responsible for coordinating their coalition's projects and implementation partners.

Finalists are the 60 coalitions the EDA selected to advance in the evaluation process after the initial application stage and awarded a \$500,000 technical assistance grant.

Awardees are the 21 coalitions the EDA selected to receive implementation grants ranging between \$25 million and \$65 million for their Phase 2 proposals.

Cluster maturity is a cluster's stage of development along a lifecycle, from "emerging" to "established" to "declining."

Historically excluded communities (HECs) are populations that have suffered from historic and systemic discrimination, disinvestment, and disenfranchisement.

Cluster interventions are specific market-oriented strategies that draw upon the capabilities and resources of firms within the cluster to promote economic development.

Cluster governance refers to the relationship between coalition leads and the other organizations implicated in executing each of the proposal's component projects.

Cluster metrics are the quantitative indicators that coalitions use to track the impact of their economic development strategies over time and across population subgroups.



Background

WHY INDUSTRIAL CLUSTERS MATTER FOR REGIONAL GROWTH

Over the long run, regional economies grow and decline based on their ability to specialize in high-value industries and evolve those specializations over time.⁷ Industry clusters—groups of firms that gain a competitive advantage through proximity and interdependence in areas such as talent and innovation—can be a compelling strategic concept, especially for communities that have struggled through economic decline.⁸

A clear body of evidence showing that firms and regions benefit from clustering has led to widespread adoption of cluster-oriented activities within the

economic development field.⁹ Yet these cluster-based economic development initiatives must contend with many forces outside of local control. Macroeconomic and technological forces have caused industries and technologies to emerge, grow, and then decline, only to be replaced by new, emergent technologies.¹⁰ For many communities, such as West Virginia's coal country, limited alternative development paths emerge as core industries decline. As global companies have restructured to focus on core competencies, the U.S. economy has seen an increase in clustering by business function, in which cities began to sort themselves into “headquarter towns,” “logistics centers,” or “production hubs.”¹¹ Relatedly, high-paying innovation sectors—and the good jobs they create—have increasingly concentrated in too few regions,

leaving many communities behind.¹² As a result, much of the U.S. economy now resembles Fresno, Calif.—with growth in lower-paying industries, but widespread economic insecurity.¹³

Inequality between regions has grown.¹⁴ And even in thriving innovation clusters such as Raleigh-Durham, N.C.’s life sciences economy, employment and entrepreneurial opportunities often bypass people and communities that have been systemically neglected by public systems and private markets—exacerbating racial and spatial inequities within regions.¹⁵

In this way, clustering is not inherently good or bad, but depends on the quality and accessibility of the opportunities industry clusters generate.¹⁶ How regional leaders can best accelerate and capture the benefits of clustering is not always straightforward, but several factors likely matter. The ability of regions to support the creation of young, high-growth firms seems to be particularly important, as these are the vehicles for innovation and the quality job creation that results.¹⁷ Institutions and infrastructure matter as well; a region’s schools, universities, and research centers influence the quality of workers and the amount of local innovation, while a region’s physical and digital infrastructure shapes how workers connect with businesses and how businesses connect with each other. And the networking, information exchange, and collective action enabled by civic institutions—such as chambers of commerce, business leadership organizations, and industry associations—can shape a region’s resilience to shocks by galvanizing and activating leadership networks to address shared challenges.¹⁸

Importantly, equitable access to these elements of a regional economic system is critical to competitiveness. Over the past two decades, a growing body of research has demonstrated that economic and demographic inclusion creates widespread economic benefits, and that exclusion exacts significant economic costs.¹⁹ Metro areas that offer greater equality of opportunity for low-income individuals have higher aggregate economic growth, since they maximize the talent and entrepreneur bases on which their growth and productivity depend.²⁰ In doing so,

these metro areas minimize the fiscal and social costs of exclusion, and foster environments that allow for better collective decision-making to shape their economic future.²¹

HOW THE BBBRC SUPPORTS CLUSTER-BASED ECONOMIC DEVELOPMENT

Inclusive, cluster-based economic development faces many barriers to successful implementation. As a recent Brookings report notes, “Inclusive economic development is hard work—and even pioneers in the field face many barriers to implementation. Local leaders typically lack the resources and organizational capacity to plan well, coordinate across actors, and respond to a patchwork of rural, tribal, and place-based programs alongside other state or philanthropic resources.”²² And a 2018 Brookings report concluded that sustaining the resources and collective action required to enact transformational cluster initiatives is actually quite rare.²³

Federal programs that establish high-level goals and distribute resources through competitions (rather than, say, needs-based formula funding) can offer one path for breaking through these planning, coordination, and investment barriers. Specifically, the BBBRC emerged out of the extraordinary emergency measures undertaken by Congress and the Biden administration during the COVID-19 pandemic. In January 2021, soon after he took office, President Joe Biden proposed an “American Rescue Plan,” and in March, Congress appropriated \$3 billion to the EDA “to prevent, prepare for, and respond to coronavirus and for necessary expenses for responding to economic injury as a result of coronavirus” as part of the American Rescue Plan Act (which included many of the president’s earlier proposals).²⁴ Aside from a requirement that at least one-quarter of the funds target communities suffering economic loss due to declines in the travel, tourism, and outdoor recreation sectors, Congress provided the EDA with significant discretion to design and deliver programs.

With this flexibility, the EDA earmarked \$1 billion for the Build Back Better Regional Challenge and released a Notice of Funding Opportunity (NOFO) in

July 2021 that outlined a two-phase competition.²⁵ Through its Phase 1 activities, the EDA issued an open call for concept proposals that outlined a high-level vision for a “transformational economic development strategy.” The idea was that regions would identify an industry cluster opportunity, design “3-8 tightly aligned projects” to support that cluster, and build a coalition to “integrate cluster development efforts across a diverse array of communities and stakeholders.”²⁶ While leaving considerable flexibility on governance structures, the EDA did require that applicants designate a strategic “quarterback” (called a “regional economic competitiveness officer”) responsible for coordinating across projects and implementation partners. The requirement was meant to signal to applicants the importance of local leadership as a competitive factor. Finally, equity was uniquely foregrounded in the NOFO: “Clusters should consider how projects can support economically disadvantaged communities and how both the projects and long-

term strategy can advance equity, including the use of quantitative and qualitative data to measure and track outcomes and performance management.” In these ways, the BBBRC incorporated several necessary design elements to enable inclusive, networked regional economic strategies.²⁷

Place-based competitive grant programs are growing rapidly across the federal government, but are still the exception, not the rule. There is less institutional muscle memory for how to effectively design and implement them. And because federal agencies are not regularly issuing large, place-based competitions, regional leaders are not used to regularly marshalling the significant capacity required to respond to them. Therefore, learning from the BBBRC’s early-stage proposal evaluation and technical assistance provision for its 60 Phase 2 finalists can help guide federal and local decisionmakers as they design and participate in place-based challenge programs.



Findings

This report draws on a detailed review of all 60 Phase 2 Build Back Better Regional Challenge applications. The applications contain many components, and this review focused on the following: an overarching strategy narrative; individual narratives for each proposed project; and budget and matching resources. These documents also contain details on industry cluster assets and opportunities; key institutions; project-level implementation details; budgets; and metrics.

In addition to the document review, the Brookings Metro research team participated in six sessions with members of the EDA team and the Phase 2 Community of Practice providers (RTI International and State Science & Technology Institute) that provided additional background on each coalition. Our objective in these reviews was to explore patterns across the sample related to cluster strategy, interventions, governance, financing, and metrics. This required a series of decisions about how to code and analyze information; we outline those decisions in a methodological appendix.

FINDING #1: THROUGH LARGE-SCALE, FLEXIBLE FUNDING, THE BBBRC ACCELERATED PATH-BREAKING REGIONAL ECONOMIC DEVELOPMENT PLANNING AND COALITION-BUILDING—A PROCESS THAT SIGNIFICANTLY STRAINED THE CAPACITY OF THE 60 FINALISTS.

The BBBRC generated a tremendous amount of interest and activity across U.S. regions. In the initial phase, 529 coalitions submitted high-level proposals that outlined a vision for the cluster, a description of potential projects, and the key institutions in the coalition. After receiving Phase 1 proposals, the EDA undertook two months of review to determine which coalitions would be awarded \$500,000 Phase 2 planning grants. Those resources enabled a hyper-intensive planning sprint between December 2021 and

March 2022. During this period, each of the 60 Phase 2 finalist coalitions expanded their five-page proposal into a 10-page overarching narrative document that outlined their approach, key assets and institutions, the portfolio of projects and their expected outcomes, and matching resources to complement the EDA grant. For each proposed project, coalitions were also asked to outline implementation, financing, and measurement details in a six-page document. The EDA also required hundreds of pages of supporting documentation.

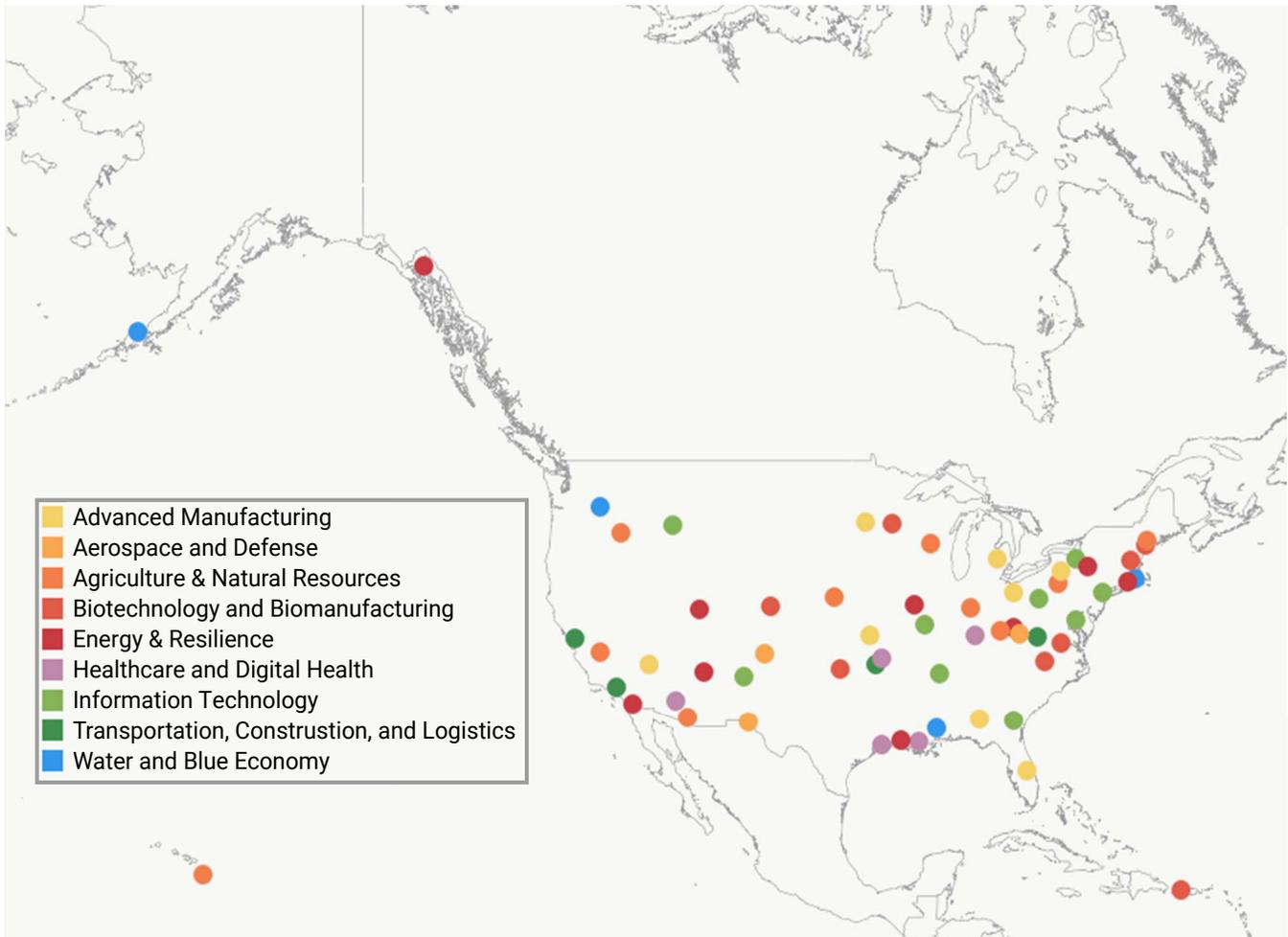
FIGURE 1
Timeline of the Build Back Better Regional Challenge



SOURCE: Brookings review of EDA press releases, the BBBRC’s program website, and conversations with EDA officials.

FIGURE 2

Geographies and industries of BBBRC finalist coalitions



SOURCE: BBBRC program website and Brookings Metro analysis of Phase 2 application materials.

A clear takeaway from both phases of the competition is that responding to a federal challenge grant with this design requires significant capacity, time, and resources. The 60 coalitions condensed into weeks what typically takes months or even years. This process accelerated widespread impact, but significantly strained the capacity of regional applicants. Beyond the \$500,000 technical assistance grant, the EDA deployed leaders in their regional offices and provided a grant to the National League

of Cities and a range of partners to provide technical assistance during this planning sprint. These actors helped applicants assess their clusters' opportunities and weaknesses, their commitment and alignment across regional partners, and their embrace of key principles such as equity and environmental resilience. More tactically, the technical assistance providers and the EDA helped the applicants understand and submit the dozens of forms required of a quick turnaround challenge grant with a significant number of projects.

Ultimately, the 60 coalitions submitted funding requests totaling \$4.3 billion—well beyond the BBBRC’s \$1 billion allocation. In May 2022, the EDA requested that the 60 finalists expeditiously revise their submissions and reduce their funding requests. At that point, an Investment Review Committee (IRC) composed of non-political federal employees from outside the EDA assessed all completed applications according to the following criteria, in relation to each region’s existing assets and capacity:²⁸

- The regional impact of the coalition’s proposed cluster strategy on historically excluded communities (HECs), as well as communities made economically vulnerable by the COVID-19 pandemic.
- The strength of the cluster’s existing assets and the assets that would be created by the coalition’s proposed project portfolio.
- The strength and commitment of the region’s private industry to lead and promote the coalition’s economic development strategy.
- The level of sustainability and durability provided to the cluster strategy through support from regional stakeholders and alignment with other economic development strategies/investments in the region.
- The comprehensiveness and feasibility of the coalition’s plan to share economic benefits derived from their cluster strategy to both urban and rural communities within the coalition’s service area.
- The feasibility of each coalition’s project portfolio.

- The level of socioeconomic distress present in the coalition’s primary service area caused by historic legacies of poverty, economic impacts of the COVID-19 pandemic, or the country’s transition away from legacy energy industries.
- The ability of the coalition to match federal funding through leveraged support from local and state governments, corporate support, and philanthropic donations.
- The strategic portfolio’s expected impact on job creation and economic growth within the coalition’s primary service area.
- The incorporation of labor protections into any construction projects included in the coalition’s project portfolio.
- The project portfolio’s alignment with the EDA’s investment priorities of equity, recovery and resiliency, workforce development, manufacturing, technology-based economic development, environmentally sustainable development, and exports and foreign direct investment.

Ultimately, while only a subset of the coalitions received implementation grants, all 60 developed new strategies, organizational coalitions, and funding approaches. As of this report’s publication, the vast majority of the 39 unfunded coalitions are still working to implement aspects of their proposed cluster strategy—suggesting that a competitive process can yield positive impact in local communities above and beyond funding.

FINDING #2: ACROSS THE 60 FINALISTS, THE BBBRC SUPPORTED THREE DIFFERENT TYPES OF CLUSTER-BASED ECONOMIC DEVELOPMENT INITIATIVES—MAXIMIZING THE RELEVANCE OF THE PROGRAM ACROSS URBAN, RURAL, AND TRIBAL COMMUNITIES.

Every region has industry clusters, but those clusters vary in their maturity, future potential, and socioeconomic benefits (e.g., equity). For cluster strategies to be successful, regional leaders must not only identify the cluster, but understand how it functions and whether interventions will be useful. In practice, this is a complicated undertaking. It not only requires an understanding of local cluster dynamics, but also how national and global markets within that cluster are evolving in a highly disruptive moment.²⁹

Adding to the complexity, BBBRC regional coalitions were asked to identify the market failures inhibiting that opportunity and why addressing those failures would unleash economic development that would not have otherwise occurred. Through the application process and in subsequent site visits, the EDA asked Phase 2 finalists to explain why the government’s resources were critical to generating economic growth based on their specific economic and civic context. Economic developers often call this the “but for” test: “*But for* this intervention, economic outcome X would not be achieved.”³⁰

Finally, equity had to be considered. Historically, cluster strategies have not foregrounded economic and racial inclusion as priority outcomes.³¹ By prioritizing equity in the NOFO, the EDA asked respondents to consider the quality and accessibility of jobs within the cluster, how new interventions could grow the cluster by better connecting underserved people and communities, and how local institutions trusted by underserved populations would be involved in and benefit from project implementation and coalition-building.

In sum, the best BBBRC proposals were able to address these three issues: the cluster moment (i.e., “why now?”), the cluster constraints (i.e., “but for”), and the cluster benefits (i.e., “for whom?”)—in a compelling vision statement. Examples include:

- A coalition in southwestern Pennsylvania received an implementation grant to capture the benefits of the AI revolution (“why now?”) by expanding the use of robotics and AI systems within small- and medium-sized manufacturers (“but for”) to improve the competitiveness of the supply chain and generate quality jobs (“for whom?”).
- A coalition in New Orleans received an award to accelerate decarbonization (“why now?”) by subsidizing new investments in technology to lower the cost of green hydrogen (“but for”) and generate good jobs for a wide range of residents (“for whom?”).
- A coalition in Tulsa, Okla. received an implementation grant to capture opportunities in the emerging autonomous mobility space (“why now?”) by investing in research and development and a new flight corridor (“but for”) to attract and grow new companies (“for whom?”).

In a review of the 60 applications, we found that the answers to each of these three questions were often most influenced by one factor: **cluster maturity**, and specifically, where a cluster is situated within the cluster lifecycle. Drawing on in-depth reviews of the applications and conversations with EDA officials, we grouped the 60 finalists into three categories along the cluster lifecycle.

- Twenty-two coalitions focused on *emerging clusters*. These clusters are at low maturation stages, and therefore likely have a higher risk of failure since many never develop past this nascent stage. Yet, regional stakeholders proposed these clusters either because: 1) the region’s level of distress justifies new cluster strategies (e.g., West Virginia’s solar cluster or Four Bands Community Fund’s indigenous finance cluster); or 2) the cluster was emerging globally, and thus the competitive

landscape was undefined and the region had a particularly compelling theory of why they could outcompete others (e.g., New Orleans’ clean energy cluster or southern New York’s battery technology cluster). While they may have different rationales, both approaches require higher risk tolerance. Over one-third of regions in this category proposed clusters in the energy and resilience sector (Figure 3). Because these regions are contending that they can use federal investment to accelerate low-maturity clusters into growing and established clusters, we call the coalitions that use this group of strategies “**contenders.**”

- Twenty-one coalitions focused on *established clusters*. These clusters are at medium- to high-maturation stages, most typically in biotechnology, information technology, and advanced manufacturing. These applicants often argued that legacy failures such as discrimination or economic isolation meant that economic opportunities generated by their established clusters were not benefiting underserved people and areas within their regions (e.g., North Carolina’s biotechnology cluster

or Detroit’s advanced mobility cluster). Or they argued the technological assets within the cluster were not being adopted by small and-midsized businesses (e.g., southwestern Pennsylvania’s robotics cluster). Because these regions are trying to extend the benefit of established clusters in more equitable ways, we call the coalitions that use this group of strategies “**extenders.**”

- The remaining 17 coalitions focused on *declining clusters*. These are high-maturity clusters that have been under competitive threat for years, even decades. Over 40% of these coalitions proposed clusters in the agriculture and natural resources sectors, arguing that federal funding was required to reinvigorate these clusters through new investments in research and development, talent, and infrastructure (e.g., Portland, Ore.’s mass timber industry or Nebraska’s agriculture industry). Because these regions are trying to reinvent their declining clusters to sustain their viability, we call the coalitions that use this group of strategies “**reinventors.**”

FIGURE 3

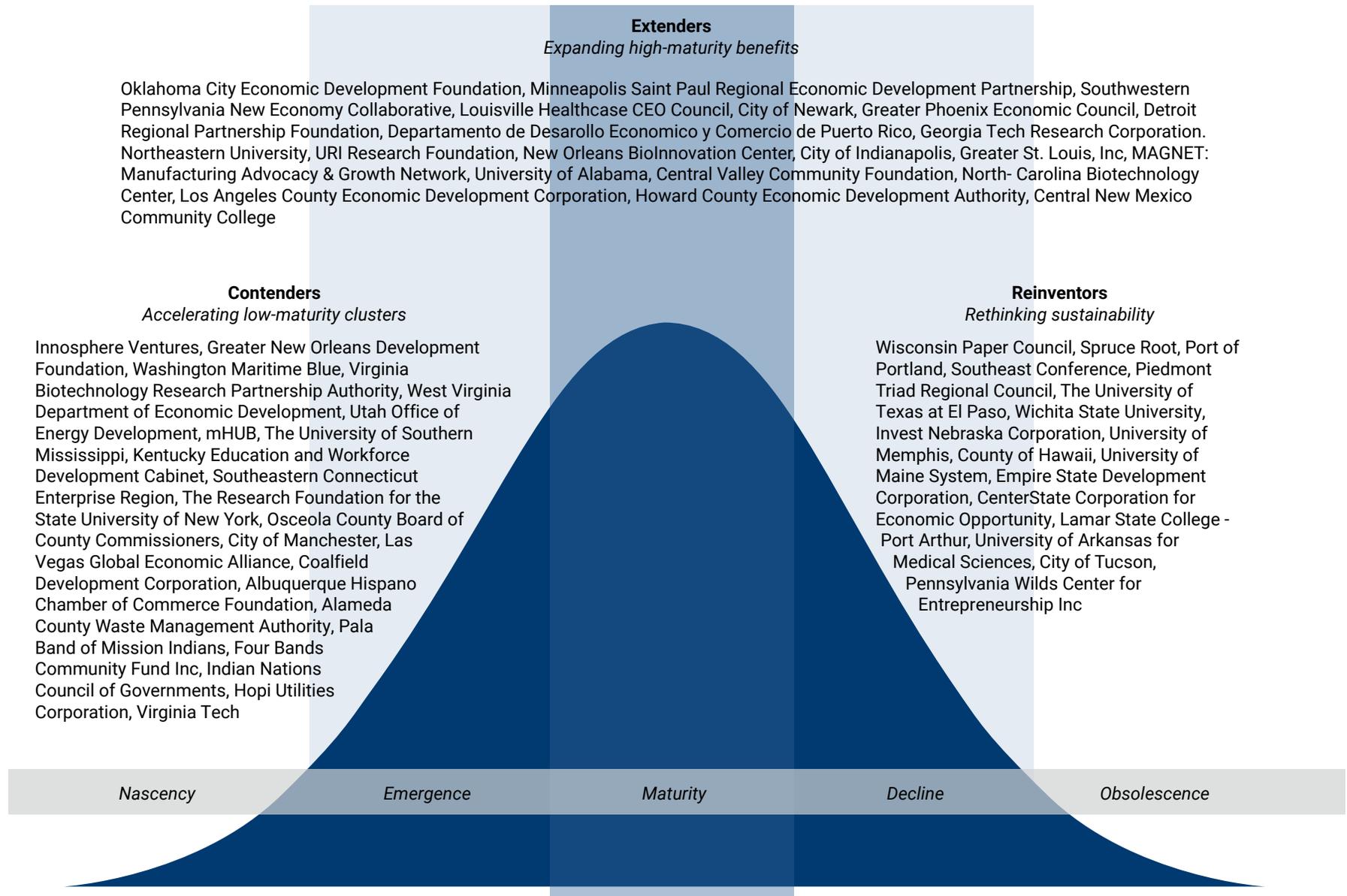
BBBRC finalists, by cluster maturity stage and industry

	Contenders	Extenders	Reinventors
Advanced Manufacturing	2	3	3
Aerospace and Defense	1	1	1
Agriculture & Natural Resources	1	2	7
Biotechnology and Biomanufacturing	3	5	
Energy & Resilience	8		1
Health Care and Digital Health		3	2
Information Technology	2	5	2
Transportation, Construction, and Logistics	3	1	
Water and Blue Economy	2	1	1

SOURCE: BBBRC program website and Brookings Metro analysis of Phase 2 application materials.

FIGURE 4

BBBRC finalists, by cluster maturity stage



SOURCE: Brookings Metro analysis of cluster maturity and analysis of Phase 2 application materials.

FINDING #3: THE BBBRC REQUIRED THAT APPLICANTS CREATE A COHERENT PORTFOLIO OF PROPOSED INTERVENTIONS, BUT LEFT IT TO THEM TO DETERMINE WHICH SPECIFIC PROJECTS WOULD BEST ADVANCE THEIR CLUSTERS.

Beyond simply identifying clusters, scaling and strengthening them requires additional work to determine what is constraining them and/or what opportunities there are to enhance cluster competitiveness and develop market-oriented responses able to draw on the capabilities and resources of the cluster's members.³² The BBBRC's designers recognized that cluster development requires multiple investments in several critical drivers of economic competitiveness. The EDA asked respondents to design project portfolios "organized under a singular vision to support industry growth across the region." To categorize projects, we modified the framework developed in a 2018 Brookings Metro report on cluster initiatives:

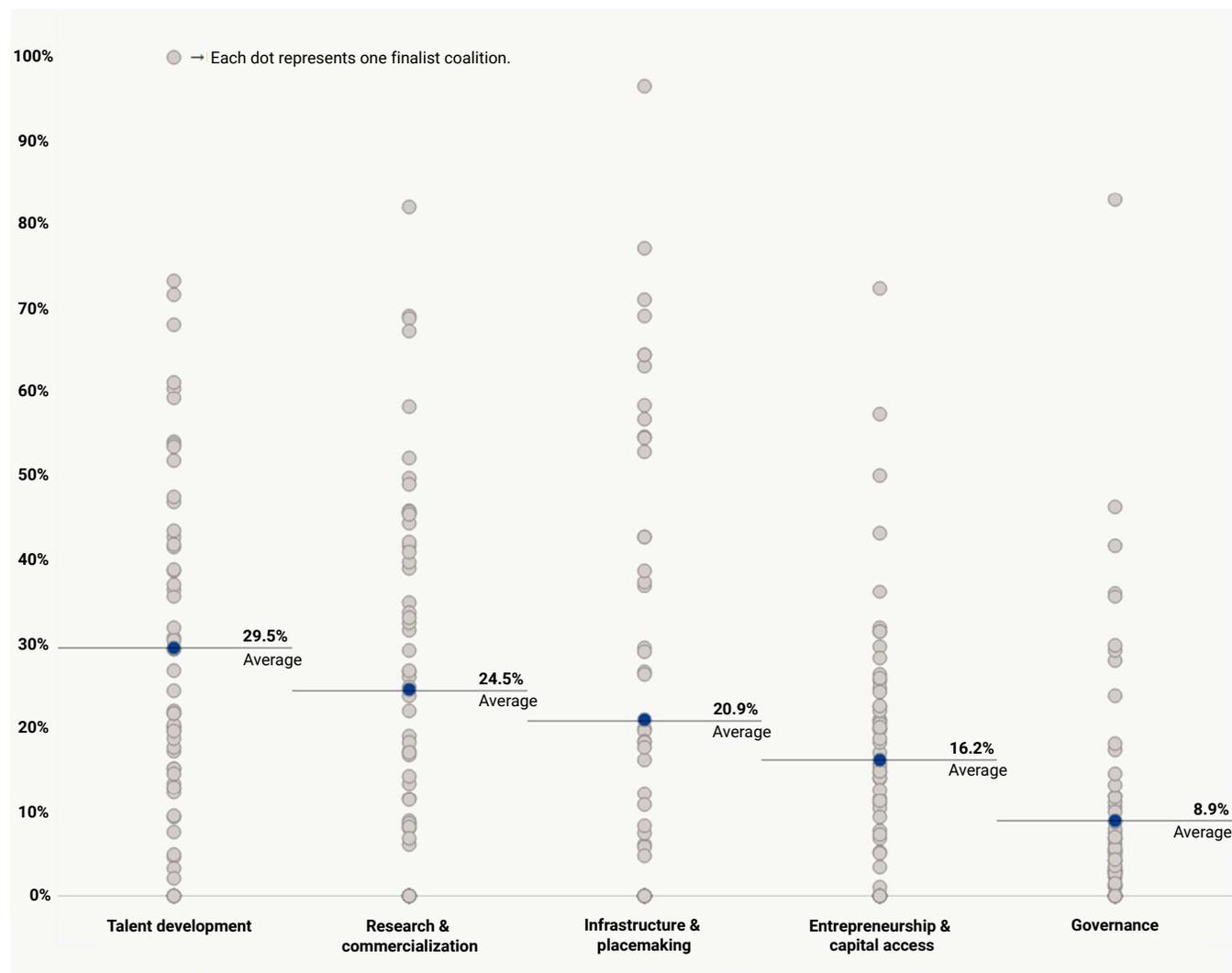
- **Talent development** interventions address skill, competency, and education deficits within the cluster through K-12 programs, higher education degree programs, workforce training programs, apprenticeships, internships, and other talent pipeline initiatives.
- **Research and commercialization** interventions address product development and innovation gaps within the cluster through R&D investment, technology adoption assistance programs for small and mid-sized businesses, product commercialization initiatives, and supply chain advancement.

- **Infrastructure and placemaking** interventions provide physical ecosystem improvements to facilitate cluster growth, typically through tailored infrastructure development, site preparation, supportive infrastructure, and multipurpose real estate development.
- **Entrepreneurship and capital access** interventions provide critical resources to young firms and entrepreneurs to support startup growth and innovation, typically through private equity facilitation, accelerator and incubator programs, and revolving loan funds.
- **Governance** interventions provide resources related to research, networks, capacity-building, and equity initiatives.

The 60 coalitions proposed 467 projects led by 309 institutions. Talent development project proposals accounted for the largest share of funding requests (30%), followed by research and commercialization (25%), infrastructure and placemaking (21%), and entrepreneurship and capital access (16%). The balance across interventions is notable and indicates how cluster initiatives seek to braid multiple investments across policy domains into a coherent strategy.

FIGURE 5

Share of coalition funding, by cluster intervention



SOURCE: Brookings Metro analysis of Phase 2 application materials. Each dot represents a finalist coalition.

While the EDA encouraged all coalitions to invest in projects across multiple interventions, there is notable variation in project portfolios across the three cluster categories.

- Given their low level of maturity, **contenders** allocated most of their proposed budget to research and commercialization (31%) or infrastructure and placemaking (28%). Often, emerging clusters were tackling major technological “moonshots.” In southeastern Louisiana, for example, the H2theFuture coalition plans to strengthen the

region’s resilience to the hydrocarbon industry’s decline through large investments in the cost competitiveness of green hydrogen. Similarly, the StopWaste Coalition is addressing a market failure in the San Francisco Bay Area’s construction industry through the integration of green materials into home construction. Both strategies require significant levels of basic and applied research to develop technological breakthroughs. Contenders also proposed major new capital and infrastructure investments (e.g., Tulsa, Okla.’s proposed autonomous mobility corridor or Kissimmee, Fla.’s

proposed semiconductor facility) to anchor an emergent cluster. Moreover, it is hard to specify talent needs when the industry is not yet demanding a large workforce. Notably, entrepreneurship was a not major focus for contenders, as theoretically emerging clusters are shaped significantly by new startups.

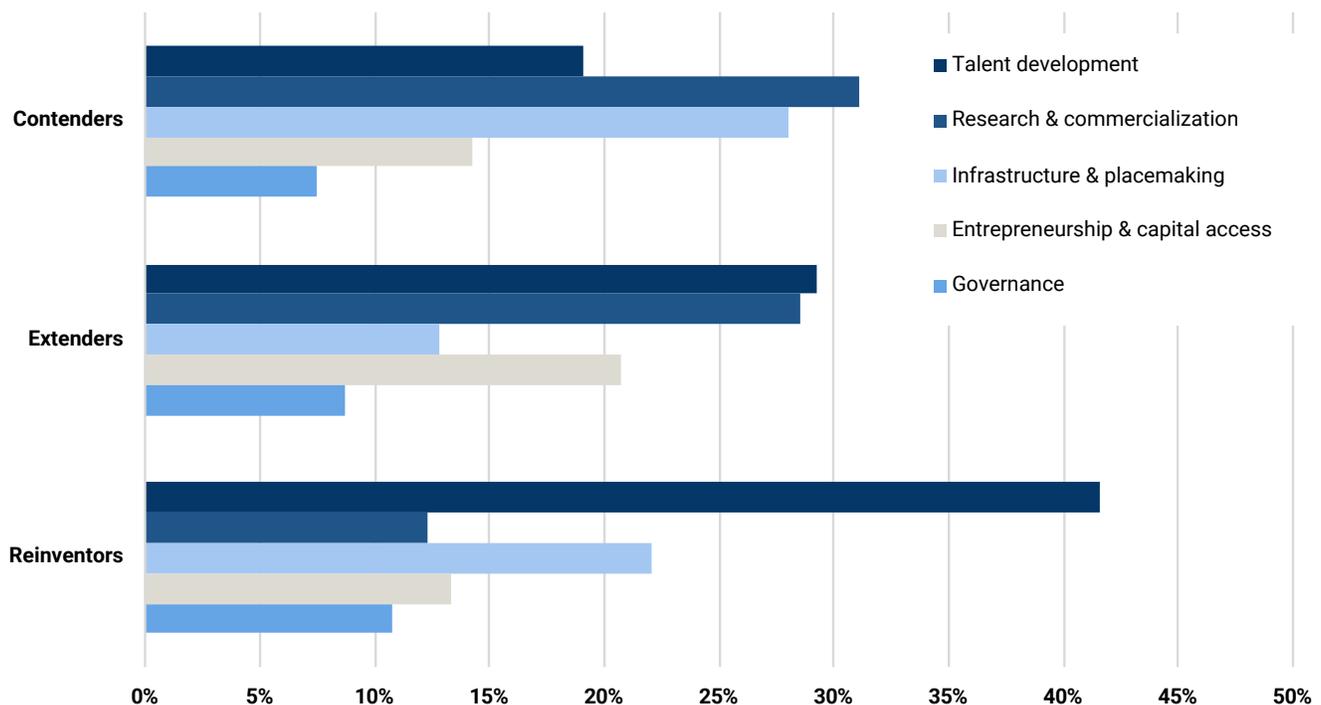
- In contrast, **extenders** proposed a higher share of investment in talent development (29%), research and commercialization (29%), and, especially relative to the other two groups, entrepreneurship and capital access (21%). With less need to invest in basic infrastructure for the cluster, extenders proposed major initiatives to help low-income residents access skills and in-demand jobs in the cluster, such as western Alabama’s comprehensive talent development strategy within the automotive sector, which bundled in-demand skills training, supportive services, and access to transportation. Other extenders focused on technical assistance and capital access programs targeted toward

overlooked and underrepresented entrepreneurs, or extension programs to help small and mid-sized businesses adopt new technologies, such as southeastern Michigan’s proposed Advanced Mobility Supply Chain Transformation Center. These interventions aim squarely at addressing the legacy demographic and geographic inequities that still inhibit these regional economies.

- Finally, **reinventors** overwhelmingly focused on talent development, which accounted for nearly 42% of proposed funding. For these regions—many of whom have suffered from economic decline and population loss—the scale and quality of their local workforce is a paramount concern. For example, as of December 2021, Nebraska has one of the lowest unemployment rates in American history (1.7%), and thus is focused on building a robotics cluster from its base of agriculture technology—both to improve productivity in the sector and build a workforce with the skills to complement more sophisticated robots.

FIGURE 6

Share of coalition funding, by intervention and cluster maturity stage



SOURCE: Brookings Metro analysis of Phase 2 application materials.

FINDING #4: NEARLY 30% OF TOTAL REQUESTED FUNDING CAME FROM NON-FEDERAL SOURCES SUCH AS LOCAL AND STATE GOVERNMENTS, INDUSTRY PARTNERS, AND PHILANTHROPY.

Beyond designing interventions, funding is a common constraint to implementing comprehensive cluster strategies. Thus, how BBBRC applications assembled resources—and the sustainability of those resources beyond the grant cycle—was of critical concern to the EDA.

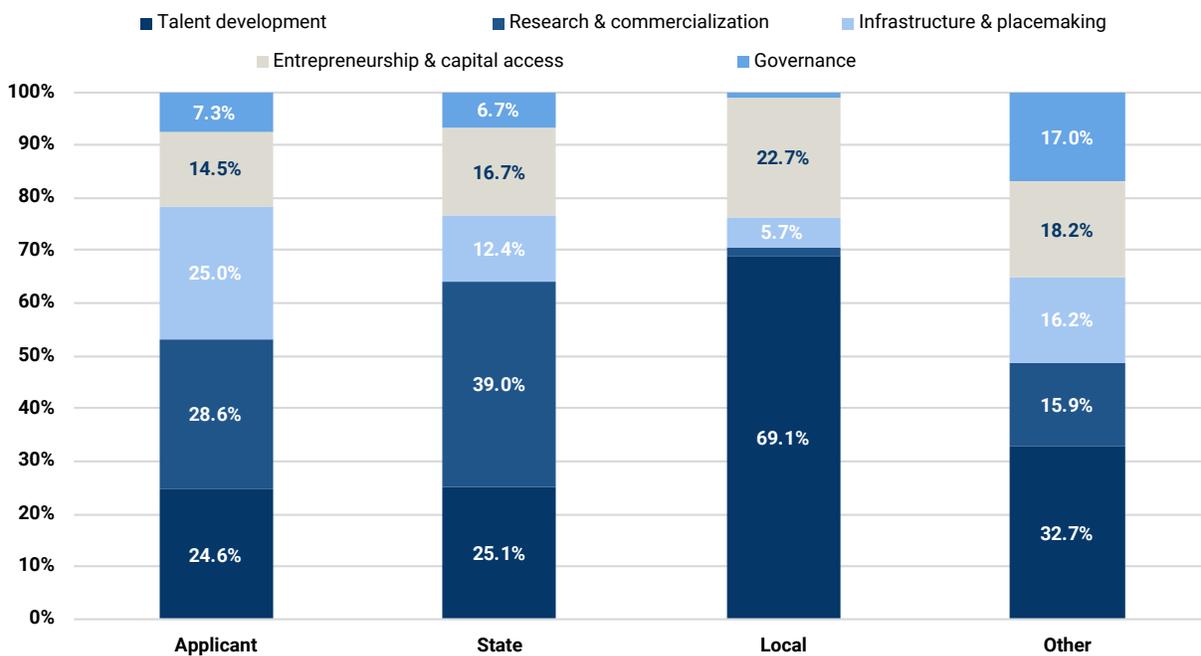
Specifically, the EDA encouraged matching resources from several sources: lead applicants, local governments, state governments, and other sources (e.g., industry, philanthropy, etc.). Across all 60 Phase 2 applications, federal resources accounted for approximately 71% of the total requested funding. Applicants themselves accounted for another 13% of funds, followed by state governments (6%), other sources (6%), and local governments (4%). These trends were relatively consistent across our cluster categories, although state governments accounted for a higher share of funding among contenders (10%), and applicants accounted for a relatively higher share

of funding among extenders (15%). Contenders tended to include more rural areas, where lead applicants have fewer resources and may be more likely to find state support. On the other hand, extenders concentrate in larger metro areas, where local applicants likely have more resources but are less likely to receive state support.

Notably, different sectors and levels of government fund different domains. For example, nearly 70% of local government funding contributions went to talent development projects, and 23% went to entrepreneurship and capital access. States, meanwhile, focus more on research and commercialization (39% of funding) and talent development (25%). The “other” category includes industry, philanthropy, and program income; those funders tend to invest in a little bit of everything, including enabling investments in research, networks, capacity-building, and equity.

FIGURE 7

Share of matched funding, by cluster intervention



SOURCE: Brookings Metro analysis of Phase 2 application materials.

FINDING #5: THE BBBRC YIELDED THREE PROPOSED CLUSTER GOVERNANCE MODELS, REFLECTING THE DIVERSITY OF INSTITUTIONS ACROSS LOCAL COMMUNITIES.

Successfully intervening in clusters requires sound governance. Evidence suggests that businesses benefit from being in regional economies that have strong, networked organizations that have bred the trust and created the capacities to enact strategies that lead to scaled change.³³ Moreover, governance itself has become increasingly networked and inclusive of a wider range of actors.³⁴

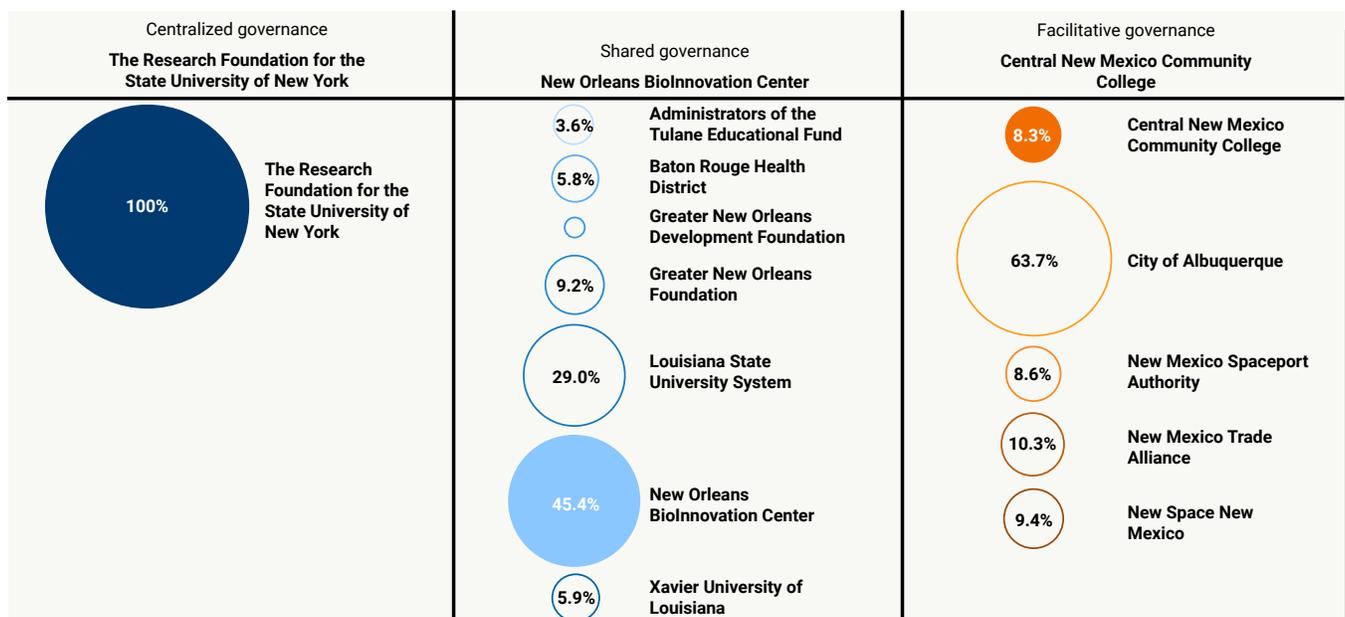
Yet governance is highly contextual, and the capacity and quality of institutions vary significantly across the country. The EDA designed the BBBRC with several governing requirements. First, it required applicants to form “coalitions” and designate a lead institution and any organizations leading individual projects within the strategy. “Partners” were organizations that supported the strategy but were not formally funded by it. Finally, each coalition also had to designate a regional economic competitiveness officer (RECO) to convene

and coordinate the coalition.

Beyond these requirements, the EDA left considerable flexibility for coalitions to organize themselves as they saw fit. We observed significant variation in how coalitions divided responsibilities. At one end of the spectrum, there were coalitions in which the lead organization was allocated more than half of the coalition’s total budget request. Of the 22 coalitions deploying this **centralized governance model**, 11 were led by research universities. At the other end of the spectrum are **facilitative governance models**, in which the lead organization was allocated less than 25% of the coalition’s total budget request. More than half of these 27 coalitions were led by industry intermediaries (16). Finally, another 11 coalitions operated **shared governance models**, in which the lead organization was allocated between 25% and 50% of the coalition’s total budget request.

FIGURE 8

Coalition portfolio examples, by governance model



SOURCE: Brookings Metro analysis of Phase 2 application materials. Data represents initial budget proposals submitted during Phase 2, prior to revision/modification.

FIGURE 9

Share of portfolio led by coalition lead, by organization type

Centralized governance	City of Newark	Government	100.0%
	The Research Foundation for the State University of New York	Higher Education	100.0%
	University of Memphis	Higher Education	100.0%
	The University of Texas at El Paso	Higher Education	100.0%
	Howard County Economic Development Authority	Industry	100.0%
	Southeast Conference	Industry	100.0%
	Hopi Utilities Corporation	Industry	98.0%
	Wichita State University	Higher Education	95.4%
	The University of Southern Mississippi	Higher Education	88.4%
	University of Alabama	Higher Education	84.3%
	Northeastern University	Higher Education	83.5%
	Kentucky Education and Workforce Development Cabinet	Government	82.1%
	Port of Portland	Government	81.5%
	University of Maine System	Higher Education	76.5%
	URI Research Foundation	Higher Education	72.2%
	Georgia Tech Research Corporation	Higher Education	71.0%
	University of Arkansas for Medical Sciences	Higher Education	69.7%
	West Virginia Department of Economic Development	Government	66.1%
	Osceola County Board of County Commissioners	Government	59.0%
	Innosphere Ventures	Industry	58.4%
Louisville Healthcare CEO Council	Industry	53.0%	
Four Bands Community Fund Inc	Community-Based Organization	51.3%	
Shared governance	City of Indianapolis	Government	49.6%
	City of Manchester	Government	47.4%
	New Orleans BioInnovation Center	Industry	45.4%
	Pennsylvania Wilds Center for Entrepreneurship Inc	Industry	41.6%
	Pala Band of Mission Indians	Government	35.6%
	Spruce Root	Community-Based Organization	35.3%
	City of Tucson	Government	35.0%
	mHUB	Industry	30.8%
	MAGNET: Manufacturing Advocacy & Growth Network	Industry	29.1%
	Lamar State College - Port Arthur	Higher Education	25.4%
	Los Angeles County Economic Development Corporation	Industry	25.2%
	Coalfield Development Corporation	Community-Based Organization	22.2%
	Alameda County Waste Management Authority	Government	21.9%
	Minneapolis Saint Paul Regional Economic Development Partnership	Industry	18.8%
CenterState Corporation for Economic Opportunity	Industry	17.2%	
Greater New Orleans Development Foundation	Industry	16.8%	
Albuquerque Hispano Chamber of Commerce Foundation	Industry	14.5%	
Piedmont Triad Regional Council	Government	13.1%	
County of Hawaii	Government	12.6%	
Wisconsin Paper Council	Industry	11.9%	
Greater Phoenix Economic Council	Industry	9.6%	
Invest Nebraska Corporation	Industry	9.4%	
Central New Mexico Community College	Higher Education	8.3%	
Detroit Regional Partnership Foundation	Industry	7.4%	
Oklahoma City Economic Development Foundation	Industry	7.3%	
Washington Maritime Blue	Industry	6.7%	
Las Vegas Global Economic Alliance	Industry	3.5%	
Greater St. Louis, Inc.	Industry	3.4%	
North Carolina Biotechnology Center	Industry	3.0%	
Empire State Development Corporation	Government	2.9%	
Utah Office of Energy Development	Government	2.6%	
Central Valley Community Foundation	Community-Based Organization	2.5%	
Departamento de Desarrollo Economico y Comercio de Puerto Rico	Government	2.2%	
Southeastern Connecticut Enterprise Region	Industry	2.1%	
Indian Nations Council of Governments	Government	0.0%	
Virginia Tech	Higher Education	0.0%	
Southwestern Pennsylvania New Economy Collaborative	Industry	0.0%	
Virginia Biotechnology Research Partnership Authority	Industry	0.0%	

SOURCE: Brookings Metro analysis of Phase 2 application materials. Data represents initial budget proposals submitted during Phase 2, prior to revision/modification.

FIGURE 10

How cluster strategies come together

NORTH CAROLINA BIOTECHNOLOGY CENTER				
MATCH (\$)	Applicant (31.6%)	State (5.4%)	Local	Other (63.1%)
GOVERNANCE	Centralized	Shared		Facilitative
INTERVENTION TYPE	Talent development	Research & commercialization	Infrastructure & placemaking	Entrepreneurship & capital
INTERVENTIONS	K-12 programs	Research & development	Tailored infrastructure	Broker services
	Workforce training	Technology adoption for SMEs	Site preparation	Private equity strategies
	Apprenticeships/internships	Product commercialization	Supportive infrastructure	Accelerators/incubators
	Higher education		Real estate	Revolving loan funds
	Talent pipeline			

COUNTY OF HAWAII				
MATCH (\$)	Applicant (62.0%)	State (16.8%)	Local (0.3%)	Other (29.0%)
GOVERNANCE	Centralized	Shared		Facilitative
INTERVENTION TYPE	Talent development	Research & commercialization	Infrastructure & placemaking	Entrepreneurship & capital
INTERVENTIONS	K-12 programs	Research & development	Tailored infrastructure	Broker services
	Workforce training	Technology adoption for SMEs	Site preparation	Private equity strategies
	Apprenticeships/internships	Product commercialization	Supportive infrastructure	Accelerators/incubators
	Higher education		Real estate	Revolving loan funds
	Talent pipeline			

PALA BAND OF MISSION INDIANS				
MATCH (\$)	Applicant	State	Local	Other
GOVERNANCE	Centralized	Shared		Facilitative
INTERVENTION TYPE	Talent development	Research & commercialization	Infrastructure & placemaking	Entrepreneurship & capital
INTERVENTIONS	K-12 programs	Research & development	Tailored infrastructure	Broker services
	Workforce training	Technology adoption for SMEs	Site preparation	Private equity strategies
	Apprenticeships/internships	Product commercialization	Supportive infrastructure	Accelerators/incubators
	Higher education		Real estate	Revolving loan funds
	Talent pipeline			

SOURCE: Brookings Metro analysis of Phase 2 application materials

FINDING #6: BBBRC COALITIONS WILL MEASURE THEIR IMPACT THROUGH A UNIQUELY BROAD MIX OF ECONOMIC DEVELOPMENT METRICS.

Metrics provide accountability for how federal dollars are being used in BBBRC strategies. The EDA sought details from applicants on how each project would collect data and set evidence- and data-based goals that were “SMART”: specific, measurable, attainable, relevant, and time-bound.³⁵ More specifically, economic development projects funded by the EDA have historically been judged through a multifaceted logic model measuring the following:³⁶

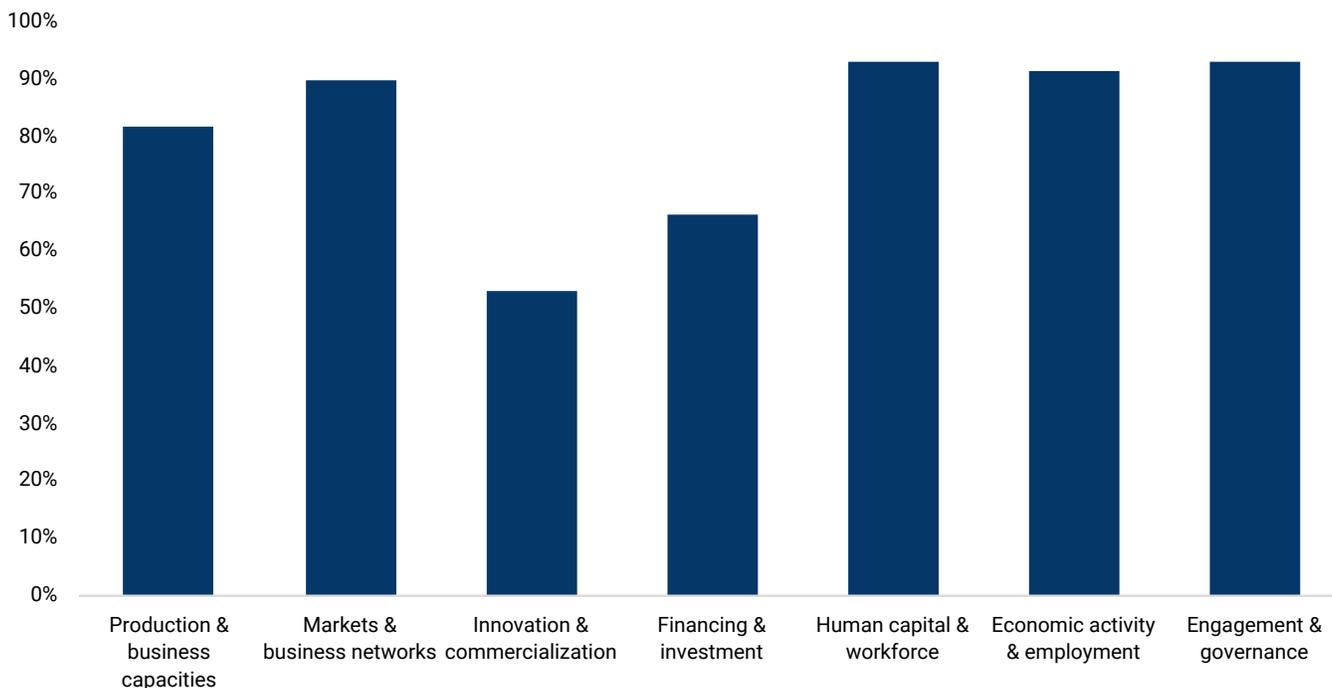
- Product, production processes, and business capacities
- Markets and business networks
- Innovation technology transfer and commercialization
- Financing and investment

- Human capital and workforce
- Organizational capacity

To account for the differences between BBBRC strategies and programs that the EDA has historically funded, we evaluated project-level metrics using a slightly adapted version of this framework. Over 90% of coalitions chose to track metrics related to markets and business networks, human capital and workforce, economic activity and employment, and engagement and governance in at least one component project within their portfolio. Less commonly, coalitions included production and business capacity metrics (82%), financing and investment metrics (67%), and innovation/commercialization metrics (53%).

FIGURE 11

Share of coalitions using metrics within their project portfolio



SOURCE: Brookings Metro analysis of Phase 2 application materials

FIGURE 12

Common project metrics



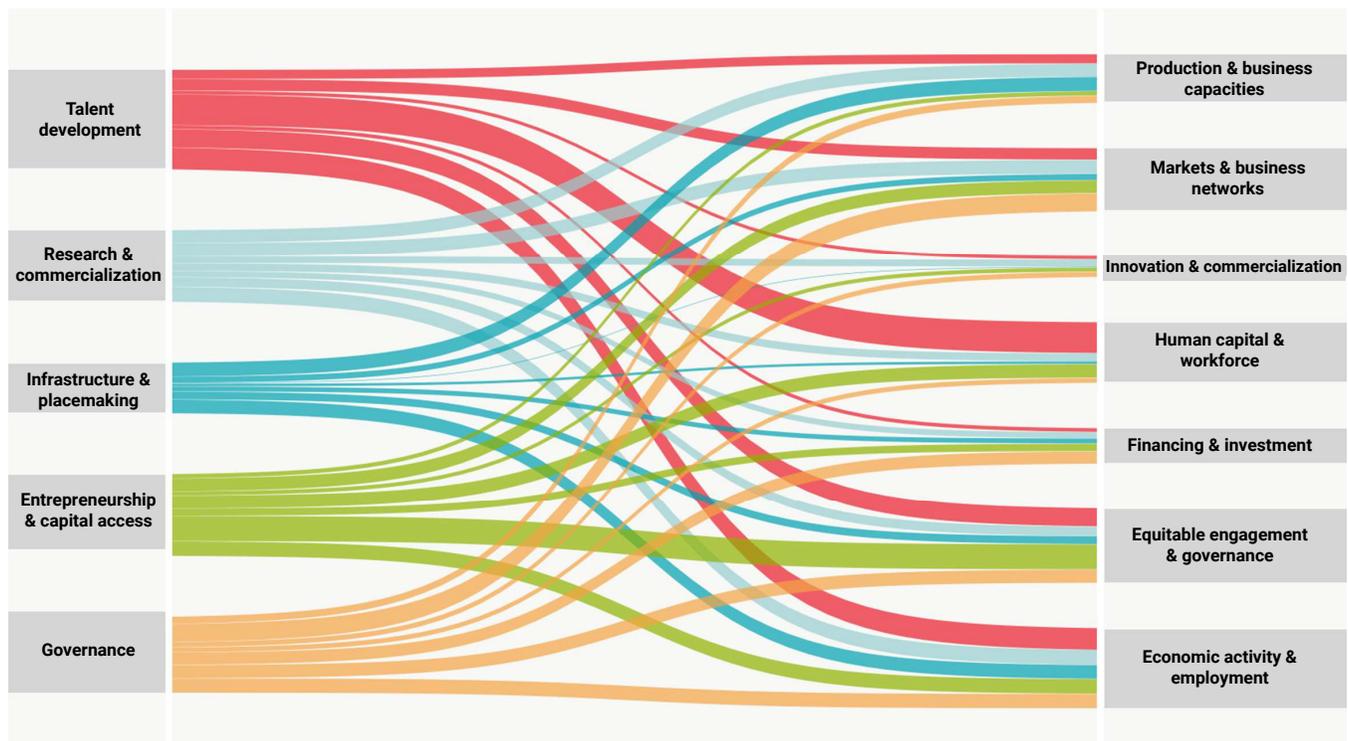
SOURCE: Brookings Metro analysis of Phase 2 application materials

Across component projects, coalitions proposed tracking impact using economic activity metrics such as job creation, retention, and/or placement. Notably, jobs remain the typical metric, regardless of the project category. In contrast, metrics that coalitions plan to track that are less strictly related to regional economic

impact align much more closely to the project’s cluster interventions; for example, talent-development-driven cluster projects orient their evaluation strategies around human capital metrics such as credential attainment, degree matriculation/completion rates, and the development of novel curricula.

FIGURE 13

Relationships between portfolio interventions and evaluation metrics



SOURCE: Brookings Metro analysis of Phase 2 application materials

FINDING #7: THE BBBRC'S TOP PRIORITY WAS EQUITY, BUT FINALISTS HAD MIXED SUCCESS EMBEDDING EQUITY IN STRATEGIES, GOVERNANCE, AND METRICS.

The EDA has outlined seven investment priorities to guide its grant investments. Equity—direct benefits to historically excluded communities—is the top-listed priority, which represents an evolution for the agency. Indeed, the EDA's recent adoption of equity as a top consideration mirrors the economic development field in general. A review of the 60 applications suggests that embedding equity into regional economic development strategies remains a work in progress.

Most commonly, BBBRC applications referenced intentional efforts to conduct community outreach and engage community-based organizations (CBOs) during planning and implementation phases. In a smaller share of applications, coalitions committed to specific equity-oriented administrative activities within their governance models, such as hiring diversity, equity, and inclusion consultants or creating dedicated equity initiatives, such as the Equity and Justice project within New Energy New York's battery technology cluster strategy.

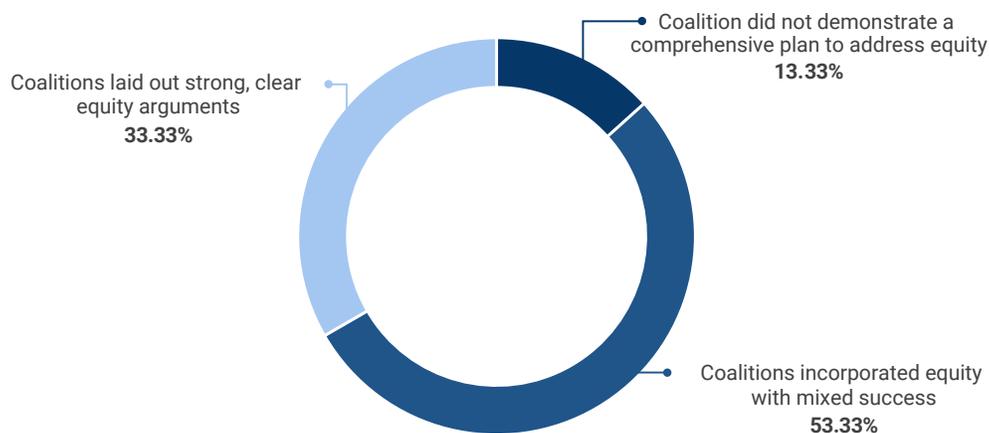
Applications such as the one from the University of Texas at El Paso integrated equity throughout their entire project portfolio and illustrated how their most equity-centric strategies would have concrete benefits for target communities. That coalition also

demonstrated their commitment to equity through stipends to ensure the accessibility of BBBRC-funded projects, supported through demonstrated success in recruiting and retaining Latino or Hispanic students for their higher education degree programs.

Yet partly due to the relatively short planning period, most coalitions struggled to develop comprehensive equity plans that integrated equity into a governance model, articulated each intervention's intended outcomes for historically excluded communities, and developed concrete metrics to track outcomes for these communities over time. Typically, applicants were able to incorporate one or two of these elements into their proposal, but few incorporated all. Equity strategies were weakest when they relied on boilerplate arguments about inclusion, either by failing to develop initiatives targeted to their region's historically excluded populations or neglecting to articulate how equity-focused community organizations were meaningfully integrated into each project's planning, governance, and execution. Indeed, gaps remain between CBOs that typically frame their missions in the context of social and economic justice and the industry and university partners that have historically led technology-based economic development strategies.

FIGURE 14

Strength of equity strategy



SOURCE: Brookings Metro analysis of Phase 2 application materials and conversations with EDA officials.

Indicators measuring equity varied considerably as well. Some coalitions developed discrete metrics that track their equity goals across investment/funding allocations and representation in coalition governance. The more typical approach was to measure equity by disaggregating broader economic metrics by race, gender, and geographic origin. Yet coalitions had mixed success in articulating how this disaggregated data

tracking translates into specific, regionally tailored benchmarks that intentionally address their region's historically excluded communities. This will be a facet of the BBBRC framework to observe as Phase 2 awardees proceed through the grant period, where they must adhere to more stringent requirements for metric tracking and impact monitoring.



Implications

There are several key takeaways from the BBBRC's design, launch, and early promise. This section outlines several implications of our initial assessment and analysis for policymakers and practitioners.

SIX POLICY DESIGN FEATURES FOR FUTURE PLACE-BASED ECONOMIC POLICIES

The Build Back Better Regional Challenge offers relevant insights for others designing place-based economic challenge programs. At the federal level, the BBBRC is the Biden administration's first place-

based challenge program, but it is not the only one. Across the American Rescue Plan Act, Infrastructure Investment and Jobs Act, CHIPS and Science Act, and Inflation Reduction Act, there is the potential for another \$77 billion in investment in the coming years.³⁷ Meanwhile, states such as California and Indiana have been designing their own place-based challenge grants, and philanthropies are pursuing similar approaches.³⁸ For these audiences, we see six notable features in the BBBRC's design that provide a high-level blueprint for further place-based challenge grants:

1. **Macro-relevant.** The BBBRC’s design positioned place-based actors as critical contributors to national missions and problem-solving. Regional respondents situated their cluster opportunities as responses to national needs articulated by the EDA: global supply chain disruptions, the public health crisis, economic security priorities, the decarbonization push, etc. This framing ensures clusters focused on battery technology, semiconductors, biotechnology, and agriculture technology are positioned not just as regional revitalization strategies, but investments of national and global importance.
2. **Micro-based.** At the same time, the BBBRC calls forth grounded problem-solving. National competitiveness derives, in part, from strong industry clusters rooted in geography. Macro success, therefore, involves getting the micro conditions right. Moreover, significant national and global forces often feel too disconnected from local civic concerns such as access to education and skills, good jobs, and quality neighborhoods. Place-based programs can translate macro concerns into the language of local actors, creating civic and political coalitions to address challenges in new ways.
3. **Network-focused.** No single institution typically has the knowledge and capacity to execute transformative regional economy strategies on its own. Cluster development—because of its reliance on university-based research and talent, industry partnership, and government funding and coordination—is uniquely dependent on networks of institutions working seamlessly across a unified vision. The BBBRC’s innovation was requiring a dynamic leader (the regional economic competitiveness officer) to recruit, organize, and drive these institutional networks toward a shared strategy.
4. **Competition-driven.** The competitive nature of the BBBRC was critical in mobilizing regions and consortia, disciplining against “business-as-usual” approaches, and catalyzing local urgency and financing. Indeed, the competitive structure—coupled with its significant resources—likely

motivated new institutional networks to rally around a shared agenda.

5. **Learning-enabled.** The BBBRC’s designers put continuous learning and technical assistance at the core of the challenge. By establishing a community of practice, offering pre-development resources to lower-capacity regions, and helping applicants learn from one another, the EDA has built a model for other federal agencies executing such programs.
6. **Risk-adjusted.** The BBBRC’s 60 finalists and 21 awardees cut across a wide swath of industries, communities, and opportunities. The reviewers had to balance several factors: likely effectiveness based on cluster maturity and potential, equity concerns, contribution to major national priorities, and fairness across the urban, rural, and tribal spectrum. Ultimately, the EDA created a balanced, risk-adjusted portfolio of grantees. As with investing, the success of the program will be measured at the portfolio-level, knowing that success will vary across individual grantees.

FIVE LESSONS FOR REGIONAL LEADERS RESPONDING TO PLACE-BASED ECONOMIC POLICIES

The tremendous demand for BBBRC resources illustrates the interest across a wide range of regional leaders to advance more comprehensive economic development strategies. For local practitioners and policymakers, the BBBRC provides useful insights as they design, deliver, and measure systemic economic transformation strategies, including responding to future federal challenge grant programs. Delivering transformational change often requires what a recent Brookings Metro report calls “systems rewiring”—a new type of civic planning with two purposes. First, it involves changing *for whom* systems work by adopting more specific, disaggregated goals and targeting strategies toward excluded populations (e.g., the EDA’s embrace of equity as a top outcome). Second, it entails changing *how* systems work by investing in interventions that build capacity both within and across institutions working at the intersection of economic development, talent development, community development, and asset development to drive impact at greater scale.

Systems rewiring often occurs continuously and organically, but there are times where systemic change can occur in short bursts. As the BBBRC has shown, large federal place-based economic competitions can catalyze new types of approaches and organizational coalitions. Drawing on this prior work as well as a review of the 60 finalists' strategies, we highlight five lessons for regional leaders that are responding to future place-based competitions:

1. Frame the challenge and an affirmative vision.

Understanding the current state of the regional economy was a critical precondition to designing effective cluster interventions. By framing problems and opportunities, regional coalitions can create the “burning platform” that motivates local institutions and coalitions to abandon the status quo. Then, by setting vision, regional coalitions can define a path to addressing problems and articulate an affirmative roadmap to connect projects and institutions. This condition is also necessary for a region to stand out to federal reviewers among hundreds of applicants.

2. Assemble the institutional coalition. Having established consensus on the problem and vision, regional leaders need to understand whether local institutions are organized in such a way that—with additional resources and strategic direction—they can deliver on those goals. By mapping institutions, regions can understand the organizational playing field for change, and whether and how multi-organizational collaboration is necessary and doable to achieve the stated goals. While still a work in progress in most BBBRC communities, the federal government's emergent emphasis on *equitable* planning processes necessitates coalition-building, which brought together institutions with traditional governing power and organizations with trust and credibility among historically excluded communities.³⁹ These organizations have not traditionally collaborated in many regions, but external opportunities such as federal grants provide a platform for new coalitions to form around a shared objective.

3. Focus action through transformative project investments. High-level visions and objectives provide a platform for systemic change, but specific

interventions are where strategies galvanize attention and succeed or fail. Reflecting the importance of project-based investments, the EDA ultimately judged BBBRC applications at the project level, including project feasibility, potential impact, sustainability, and equity benefits. Projects with the potential to drive regional economic transformation require significant resources from every sector and complex collaboration across institutions. Except in rare instances, BBBRC coalitions adopted a process in which the coalition lead played a convening function—establishing a vision and high-level priorities—but then delegated most project design to implementing organizations with deeper expertise in research and development, talent development, real estate development, and entrepreneurship and business development.

4. Build collaborative financing approaches. Often, the limiting factor in transformational strategies is resources. Changing the trajectory of a regional economy is expensive, and regions usually rely on three potential funding sources: public investment (local, state, federal investment), private investment (corporate spend, capital markets), or philanthropy. Communities must braid all three sources together into a select few priorities to achieve the scale necessary to enact transformative change. As they solicit resources for a multi-project strategy, BBBRC applicants' financing strategies—and particularly, which types of projects draw leverage from which funding sources—provide a useful roadmap for regional actors seeking resources from corporate, philanthropic, and state government funders.

5. Establish holistic indicator frameworks. Historically, regional economic development strategies measured impact based on jobs, GDP, and investment. These economic activity metrics were among the most cited across the BBBRC applications, but so were indicators measuring markets and business networks, talent development, and governance and community engagement. The varying BBBRC metrics approaches indicate how regional leaders are striving to develop more holistic, inclusive indicator frameworks, but still need help to develop the data and tracking systems to implement them.

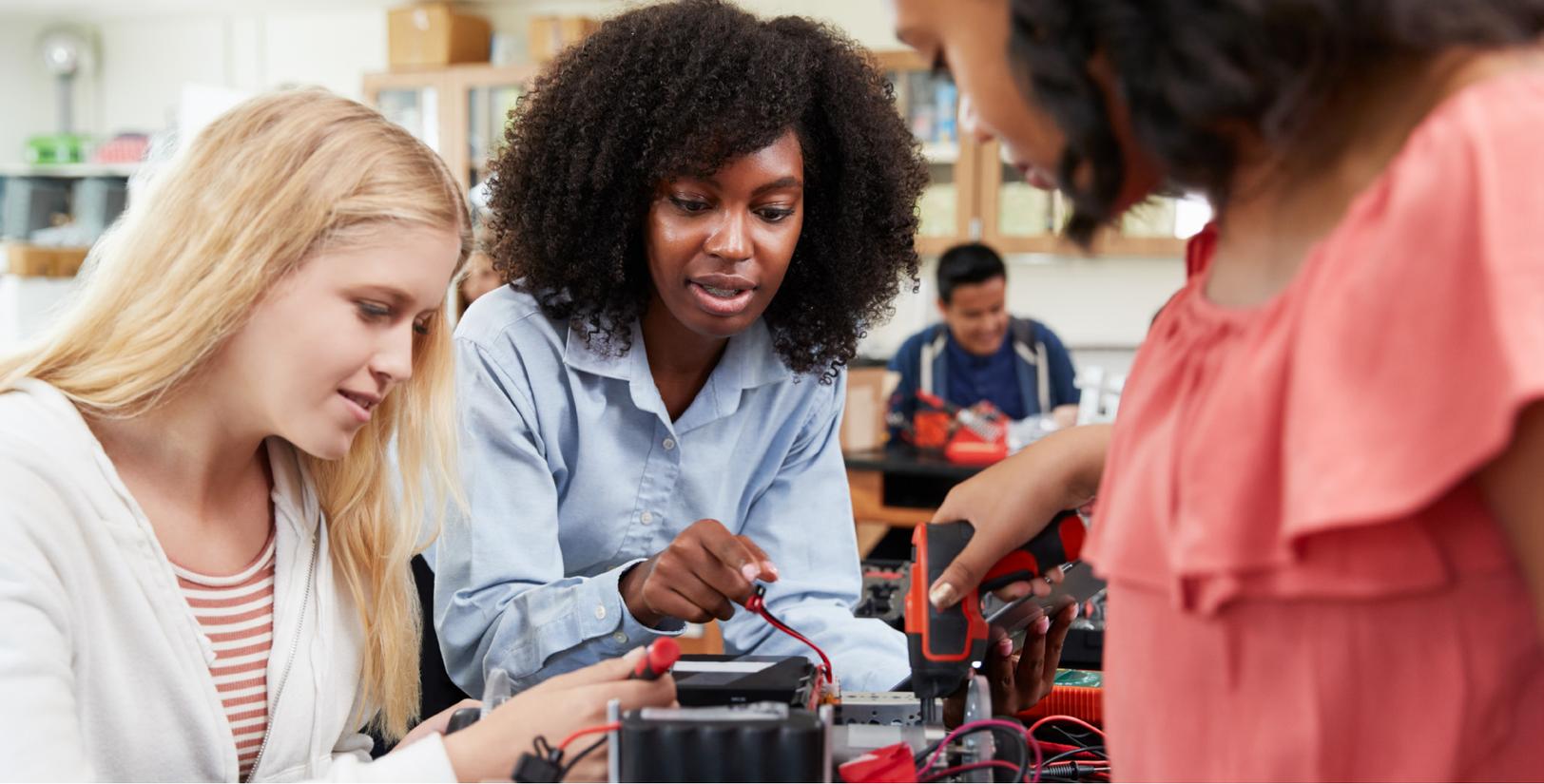


Conclusion

The first years of the 2020s—in which the nation contended with the COVID-19 pandemic, digital disruptions, climate change, racial and gender divides, and the continuing need for more middle-class jobs—have ushered in a period of bold, urgent responses. Across the federal government, agencies are launching larger-scale, more in-depth initiatives for accelerating innovation, optimizing supply chains, mitigating climate change, and addressing demographic and geographic inequities.

Yet what is equally important is the new surge of programs using place-based, challenge-oriented

design—as displayed first by the Build Back Better Regional Challenge—to model a significant set of noteworthy experiments for addressing the nation's largest problems. These experiments deploy national leadership in compelling ways to convene local consortia, mobilize regional networks, build collaborative financing approaches, and align it all with the nation's most urgent priorities. They are also piloting a new era of national problem-solving, across geographies and in service of economic inclusion. In that context, it is well worth the effort to study the BBBRC's initial blueprint with an eye toward extracting guidance for more such initiatives.



Methodological appendix

This report draws on a detailed review of all 60 Phase 2 Build Back Better Regional Challenge applications. The applications contain many components, and this review focused on the following: an overarching strategy narrative; individual narratives for each proposed project; and budget and matching resources. These documents also contain details on industry cluster assets and opportunities; key institutions; project-level implementation details; budgets; and metrics. In addition to the document review, the Brookings Metro research team participated in six sessions with members of the EDA team and the Phase 2 Community of Practice providers (RTI International and State Science & Technology Institute), which provided additional background on each coalition. Our objective in these reviews was to explore patterns across the sample related to cluster maturity, cluster governance, cluster interventions, and cluster metrics. This required a series of decisions about how to code and analyze information. We outline those decisions below.

Cluster maturity

We categorize coalitions' cluster maturity using a framework summarized in Brookings Metro's 2018 report *Rethinking Cluster Initiatives*.⁴⁰ Cluster maturity is typically measured along a lifecycle, from emerging to established to declining. As discussed in this report, assessing a cluster's growth potential and development stage allows regional stakeholders and grant program decisionmakers to evaluate the risks and rewards of investing in regional economic development strategies geared toward that cluster. In this instance, determining cluster maturity was a qualitative exercise, since we could not define the proposed clusters in ways that allowed for quantitative analysis. Therefore, we use a qualitative review of Phase 1 and Phase 2 application materials to assess how the local applicants define the current maturity of their cluster, including data on recent cluster performance provided by each applicant. We also used discussions with the EDA to incorporate their

conclusions. By analyzing each coalition through the lens of their targeted cluster's maturity level, each category defined by this typology is mutually exclusive, collectively exhaustive, and broad enough to maintain relevance for regional leaders who may wish to draw upon this report's findings.

Cluster interventions

Brookings's Rethinking Cluster Initiatives report notes that "scaling and strengthening clusters requires additional work to identify cluster constraints and opportunities, and subsequently, the development of market-oriented responses that are able to draw upon the capabilities and resources of the clusters firms." Drawing inspiration from a framework developed in that report, we classified each BBBRC component project using the following scheme:

- **Talent development** interventions address skill, competency, and education deficits within the cluster through K-12 programs, higher education degree programs, workforce training programs, apprenticeships, internships, and other talent pipeline initiatives.
- **Research and commercialization** interventions address product development and innovation gaps within the cluster through R&D investment, technology adoption assistance programs for small and mid-sized businesses, product commercialization initiatives, and supply chain advancement.
- **Infrastructure and placemaking** interventions provide physical ecosystem improvements to facilitate cluster growth, typically through tailored infrastructure development, site preparation, supportive infrastructure, and multipurpose real estate development.
- **Entrepreneurship and capital access** interventions provide critical resources to young firms and entrepreneurs to support startup growth and innovation, typically through private equity facilitation, accelerator and incubator programs, and revolving loan funds.

- **Governance** interventions provide resources related to research, networks, capacity-building, and equity initiatives.

Projects with complex strategic initiatives were assigned multiple intervention categories. However, 82% of the projects across all BBBRC applications were assigned a single intervention tag.

Cluster governance

This report creates governance categories based on the share of the portfolio's total budget request allocated to projects led by the coalition lead applicant, as provided in each coalition's Overarching Component Application List submitted with their full Phase 2 application. Based on this ratio, each coalition's governance structure has been defined as "facilitative" when the coalition lead applicant has been allocated less than 25% of the portfolio's total budget request; "shared" when they have been allocated between 25% and 50% of the portfolio's total budget request; or "centralized" when they have been allocated more than 50% of the portfolio's total budget request.

Cluster metrics

To quantify how each coalition has designed goal-setting strategies and how successfully they adhere to these principles, we reviewed Phase 2 component narratives and overarching coalition narratives to assign each project to at least one goal-setting strategy developed by the EDA.⁴¹ These categories include:

1. Product, production processes, and business capacities
2. Markets and business networks
3. Innovation technology transfer and commercialization
4. Financing and investment
5. Human capital and workforce
6. Organizational capacity

As a result of the complexity each component project embodies, most projects were assigned multiple metric tags.

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ENDNOTES

- 1 U.S. Department of the Treasury. “Remarks by Secretary of the Treasury Janet L. Yellen at Ford Rouge Electric Vehicle Center [Press release]”. <https://home.treasury.gov/news/press-releases/jy0939>
- 2 The White House. “Remarks on a Modern American Industrial Strategy by NEC Director Brian Deese [Press release]”. April 20th, 2022. <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/04/20/remarks-on-a-modern-american-industrial-strategy-by-nec-director-brian-deese/>
- 3 Pisano, G., Shih, W. “Producing Prosperity: Why America Needs a Manufacturing Renaissance”. Harvard Business Review Press. October 16th, 2012.
- 4 Atkinson, D., Muro, M., Whiton, J. “The Case for Growth Centers: How to Spread Tech Innovation Across America”. The Brookings Institution Metropolitan Policy Program. December 9th, 2019.
- 5 Berube, A., Crump, S., Friedhoff, A. “Metro Monitor 2021”. The Brookings Institution Metropolitan Policy Program. <https://www.brookings.edu/interactives/metro-monitor-2021/>
- 6 <https://www.brookings.edu/research/remark-ing-economic-development-the-markets-and-civ-ics-of-continuous-growth-and-prosperity/>
- 7 Storper, M. “Keys to the City: How Economics, Institutions, Social Interaction, and Politics Shape Development”. Princeton University Press. July 21st, 2013.
- 8 Feser, E., Renski, H., Goldstein, H. “Clusters and Economic Development Outcomes: An Analysis of the Link Between Clustering and Industry Growth”. *Economic Development Quarterly* 22, No. 4 (November 1, 2008): 324–44, <https://doi.org/10.1177/0891242408325419>. Maskell, P., Kebir, L. “What Qualifies as a Cluster Theory?”. *Clusters and Regional Development: Critical Reflections and Explorations*, (2006): 30-49.
- 9 Mark Muro and Bruce Katz, “The New ‘Cluster Moment’: How Regional Innovation Clusters Can Foster the Next Economy” (Washington: Brookings Institution, 2010). Muro, M., Katz, B. “The New ‘Cluster Moment’: How Regional Innovation Clusters Can Foster the Next Economy”. *Brookings Metro*. September 21st, 2010.
- 10 Storper, M. “Keys to the City: How Economics, Institutions, Social Interaction, and Politics Shape Development”. *Princeton University Press*. July 21st, 2013.
- 11 Gilles Duranton and Diego Puga, “MicroFoundations of Urban Agglomeration Economies,” in *Handbook of Regional and Urban Economics*, vol. 4 (Elsevier, 2004), 2063–2117
- 12 Atkinson, D., Muro, M., Whiton, J. “The Case for Growth Centers: How to Spread Tech Innovation Across America”. *Brookings Metro*. December 9th, 2019.
- 13 Ross, M., Bateman, N. “Meet the Low-Wage Workforce”. *Brookings Metro*. November 7th, 2019
- 14 Manduca, R. “How National Income Inequality in the United States Contributes to Economic Disparities Between Regions”. *Washington Center for Equitable Growth*. March 27th, 2019. <https://equitablegrowth.org/how-national-income-inequality-in-the-united-states-contributes-to-economic-disparities-between-regions/>
- 15 Parilla, J. “Opportunity for Growth: How Reducing Barriers to Economic Inclusion Can Benefit Workers, Firms, and Local Economies”. *Brookings Metro*. September 28th, 2017.
- 16 Thomas Kemeny and Michael Storper, “Is Specialization Good for Regional Economic Development?,” *Regional Studies* 49, no. 6 (2015): 1003–18.
- 17 Decker, R., et al. “Declining Business Dynamism: Implications for Productivity?” *Brookings Metro*. September 19th, 2016. Economic Innovation Group. “Dynamism in Retreat: Consequences for Regions, Markets, and Workers”. February 1st, 2017. Economic Innovation Group. “Dynamism in Retreat: Consequences for Regions, Markets, and Workers”. February 1st, 2017. Hathaway, I., Litan, R. “Declining Business Dynamism in the United States: A Look at States and Metros”. *Brookings*

- Metro*. May 5th, 2014.
- 18 Storper, M. "The Neo-Liberal City as Idea and Reality". *Territory, Politics, Governance* 4, No. 2 (April 2, 2016): 241–63, <https://doi.org/10.1080/21622671.2016.1158662>.
 - 19 Dixon-Fyle, S., et al. "Diversity Wins: How Inclusion Matters." *McKinsey & Company*. May 19th, 2020. Hsieh, C., et al. "The Allocation of Talent and U.S. Economic Growth". Working Paper No. 18693, *National Bureau of Economic Research*, 2016.
 - 20 Bradbury, K., Triest, R. "Inequality of Opportunity and Aggregate Economic Performance". *The Russell Sage Foundation Journal of the Social Sciences*, No. 2(2)(2016): 178–201. Parilla, J. "Opportunity for Growth: How Reducing Barriers to Economic Inclusion can Benefit Workers, Firms, and Local Economies". *Brookings Metro*. September 28th, 2017
 - 21 Ibid.
 - 22 Liu, A., et al. "Making Local Economies Prosperous and Resilient: The Case for a Modern Economic Development Administration". *Brookings Metro*. June 27th, 2022.
 - 23 Donahue, R., Parilla, J., McDearman, R. "Rethinking Cluster Initiatives". *Brookings Metro*. July 25th, 2018.
 - 24 H.R.5585 - 117th Congress. "ARPA-H Act". June 23rd, 2022. <http://www.congress.gov/>
 - 25 Economic Development Administration. "FY 2021 American Rescue Plan Act Build Back Better Regional Challenge Notice of Funding Opportunity (NOFO) (ARPA BBBRC NOFO)." *U.S. Department of Commerce*. <https://www.eda.gov/arpa/build-back-better>
 - 26 Ibid
 - 27 Liu, A. "Remaking Economic Development". *Brookings Metro*. February 29th, 2016.
 - 28 Economic Development Administration. "FY 2021 American Rescue Plan Act Build Back Better Regional Challenge Notice of Funding Opportunity (NOFO) (ARPA BBBRC NOFO)." *U.S. Department of Commerce*. <https://www.eda.gov/arpa/build-back-better>
 - 29 Ibid.
 - 30 Parilla, J., Liu, S. "Examining the Local Value of Economic Development Incentives". *Brookings Metro*. March 6th, 2018.
 - 31 McDearman, B., Parilla, J., Donahue, R. "A New Federal Grant Should Make Regional Leaders Rethink Their Industry Clusters". *Brookings Metro (blog)*. September 1st, 2021.
 - 32 Donahue, R., Parilla, J., McDearman, R. "Rethinking Cluster Initiatives". *Brookings Metro*. July 25th, 2018.
 - 33 Storper, M., et al. "The Rise and Fall of Urban Economies: Lessons from San Francisco and Los Angeles". Stanford University Press. September 2nd, 2015.
 - 34 Bellamy, R., Palumbo, A. "From Government to Governance". *Routledge*. May 28th, 2010.
 - 35 Economic Development Administration. "FY 2021 American Rescue Plan Act Build Back Better Regional Challenge Notice of Funding Opportunity (NOFO) (ARPA BBBRC NOFO)." *U.S. Department of Commerce*. <https://www.eda.gov/arpa/build-back-better>
 - 36 Economic Development Administration. "Innovative Metrics for Economic Development: Final Report". *U.S. Department of Commerce*. November 17th, 2017.
 - 37 Forthcoming Brookings Metro research from Mark Muro and Robert Maxim.
 - 38 Forthcoming Brookings Metro research from Mark Muro and Sifan Liu.
 - 39 Pastor, M., et al. "Leading Locally: A Community Power-Building Approach to Structural Change". USC Dornsife Equity Research Institute. September 19th, 2020. Owing to turbulent change in 2020 and 2021, many communities are experiencing contested institutional legitimacy. A report from the USC Equity Research Institute offers a useful framework to understand contested institutional legitimacy through the concepts of governing power and community power. Governing power is the ability to advocate, win, implement, and oversee policy change. Formal governing power resides with local elected officials and public administrators. Informal governing power is often wielded by corporations, philanthropies, and even individuals who can use their significant resources to influence local government decisionmaking or finance a civic agenda outside of government. The USC report contrasts governing power with community power, which is characterized by

communities most impacted by structural inequity working together to change policies and systems to advance equity.

- 40** Donahue, R., Parilla, J., McDearman, R. ““Rethinking Cluster Initiatives”. *Brookings Metro*. July 25th, 2018.
- 41** Economic Development Administration. (2017). *Innovative Metrics for Economic Development: Final Report*.

An aerial photograph of a city highway and skyline, overlaid with a blue tint. The highway is a multi-lane expressway with many cars. To the left is a river, and in the background is a dense urban skyline with various skyscrapers, including one with a construction crane on top.

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