

SUPPORTING DISTRESSED COMMUNITIES BY
STRENGTHENING REGIONAL PUBLIC UNIVERSITIES:

A federal policy proposal



ROBERT MAXIM AND MARK MURO

JULY 2021

B | Metropolitan Policy Program
at BROOKINGS

Contents

| | |
|-----------|---|
| 3 | Proposal |
| 4 | The problem |
| 11 | Policy design |
| 22 | Fiscal and economic implications |
| 26 | Conclusion |
| 27 | Appendix: Defining “distressed community” |
| 29 | References |
| 30 | Endnotes |
| 34 | Acknowledgements |

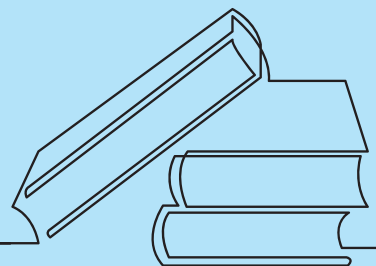




California State University, Fresno.
Photo credit: Shutterstock.

1. Proposal

As the U.S. economy begins its recovery from the COVID-19 pandemic and recession, policymakers have an interest in ensuring that distressed communities are not left behind. While federal policymakers are currently considering ideas to provide transformative investments to states and metropolitan areas, more needs to be done to reverse local distress. This report proposes providing federal grants of between \$25 million and \$50 million, paid over five years, to regional public universities situated in distressed communities to support those schools' economic and community development missions. Doing so will both provide new resources for critical neighborhood anchor institutions and help close federal funding gaps that exist between regional public universities and larger public research universities.



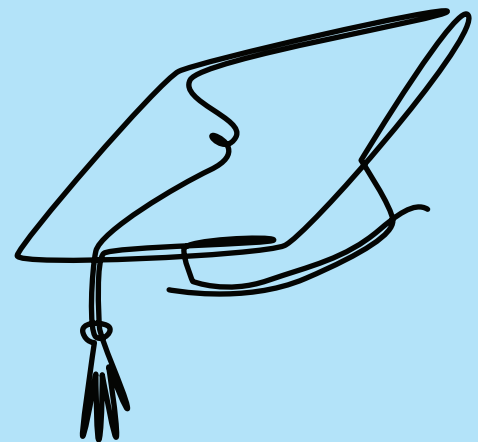


Cleveland State University.
Photo credit: Shutterstock.

2. The problem

Although the COVID-19 pandemic continues to have public health and economic impacts in the U.S., national case numbers are at just a fraction of their winter peak, and forecasters are predicting the economy will grow significantly in the latter half of 2021.¹ However, if the coming recovery resembles the most recent two, it will likely be spatially uneven, with some places making a quick recovery while other communities, both urban and rural, face continued economic distress.

The U.S. has a stated interest in promoting a nationwide recovery that filters through to every community. But without a concerted policy effort focused on distributing growth equitably throughout the country, that may not happen. Indeed, even as the economy reached nearly full employment in late 2019, there remained distressed communities throughout the U.S. In some, employment remained below where it was before the Great Recession of 2007. In others, poverty rates remained elevated. When recoveries are not equitable, it has negative effects not only on the places left behind, but on the nation as a whole.²



Some policymakers and commentators have hoped that the widespread adoption of telework during the pandemic would help mitigate some of this economic divergence. However, these changes in the way companies operate are unlikely to make the nation's economic geography more evenly distributed. If anything, they may actually exacerbate existing inequalities, given that the types of digital technologies that enable telework helped lead to this economic concentration in the first place.³

Growing economic divergence is being driven by U.S. migration that is now largely segmented by education level. Today, more highly educated workers disproportionately move to a relatively small group of high-growth metro areas, while less educated workers are more place-bound.⁴ This trend has generated a poorly sorted U.S. labor market, not only driving up costs in “superstar” cities as more highly educated workers crowd into them, but leaving other communities with fewer people and fewer jobs—and a greater share of jobs that are low-wage, low-productivity, and less upwardly mobile.

Education-based sorting not only has economic costs, but also tremendous social costs.⁵ Millions of workers in these left-behind places face limited prospects for finding well-paying, accessible work. This limits their quality of life, both materially and in terms of personal fulfillment and mental health. Additionally, less economic activity also means less local tax revenue, which in turn degrades government services in these places. In short, the nation's stratified economic geography is a problem with implications for all places—and one that is unlikely to naturally sort itself out.

Simply giving up on distressed communities and encouraging more workers to migrate to high-growth metro areas is not the solution. New evidence suggests that severe regional imbalance may hurt the nation's aggregate economic growth—meaning extreme spatial inequality may not hurt only the places left behind, but also have negative impacts for residents in “superstar” places as well.⁶ This is why recent Brookings work has focused on bringing economic opportunity to those left-behind people and places. On the metropolitan area level, work by Mark Muro and Jacob Whiton of Brookings and Rob Atkinson of the Information Technology and Innovation Foundation proposed providing \$100 million in federal support to metropolitan areas in the U.S. heartland that are lagging coastal superstar metro areas. Complementing that proposal is work by Tim Bartik at the Upjohn Institute, who has proposed a federal grant program to support distressed communities, defined on a commuting-zone level (commuting zones are geographical areas at the approximate scale of metropolitan areas).⁷

These policies are urgently needed to help restructure the economy-wide divergence occurring in the U.S. But in many cases, there are more localized pockets of distress in urban neighborhoods and rural communities—sometimes even in generally prosperous places—that are not visible on a metropolitan area or commuter-zone scale. In these places, anchor institutions can be important assets for supporting local job creation, housing, and other forms of economic and community development. The policy proposal in this report aims to support one class of anchor institutions—regional public universities—to mitigate local distress and support inclusive growth.



Fort Valley State University.
Photo credit: Jud McCranie via Wikimedia Commons.



Why regional public universities matter for distressed communities

Regional public universities (RPU) can serve as important anchor institutions to promote economic and community development for distressed communities, and are a class of institution that stands to benefit from substantially more federal support.

As previous Brookings research has shown, RPUs have a variety of benefits for communities. Counties with an RPU have historically had both faster employment growth and higher per capita income than communities without an RPU.⁸ RPUs are also important drivers of in-migration for communities, attracting both students as well as educated workers to serve as faculty and staff.⁹ Because RPUs are both producers and attractors of workers with postsecondary credentials, counties with an RPU tend to have significantly higher bachelor's degree attainment rates than counties without one.¹⁰ In this way, when coupled with robust demand from industry, RPUs can counter ongoing out-migration trends that many distressed communities face.

As anchor institutions, RPUs are among the largest (and sometimes the largest) employers in a community. In smaller communities, RPUs regularly account for between 3% to 5% of direct employment, and generate a significant amount of indirect employment as well.¹¹ Along those lines, recent

research by Kevin R. McClure, Cecilia M. Orphan, Alisa Hicklin Fryar, and Andrew Koricich for the Alliance for Research on Regional Colleges shows that the number of rural counties served by RPUs that are designated as "low employment counties" would more than double, from 19 to 51, were it not for the employment provided by the universities.¹²

RPUs also support regional economic resilience during downturns and other economic shocks. Forthcoming research from Greg Howard, Russell Weinstein, and Yuhao Yang at the University of Illinois found that the presence of an RPU roughly offset the negative effects of exposure to U.S. manufacturing decline in the late 20th and early 21st centuries.¹³ Not only that, but the presence of an RPU enabled resilience to the late 20th century mining decline in coal- and oil-producing regions, as well as to the business cycle in general.¹⁴

In short, there are a variety of economic and social benefits for communities in close proximity to well-funded, accessible higher education institutions. However, with state higher education budgets constrained, public universities—in particular, regional public universities—have been reducing public service and community development expenditures in recent years.¹⁵ This lessens the positive benefits that communities can reap from hosting a university, and suggests the need for more concerted federal intervention.

The unique role of RPUs in local economic development

RPUs play a distinct role from larger public universities, including those that conduct the highest levels of research (known as “Research 1” or R1 universities), as well as land-grant universities. For the purposes of this analysis, the term “land-grant universities” refers to universities designated as land-grant institutions under the Morrill Act of 1862. There are two other classes of land-grant institutions—1890 land-grant institutions, which are historically Black colleges and universities (HBCUs), and 1994 land-grant institutions, which are Native American Tribal Colleges and Universities (TCUs)—that are discussed in more detail later in this report.

R1 and land-grant universities are known for their roles in basic and applied scientific research (funded by government, industry, and universities themselves), as well as technology transfer and commercialization, which is the process by which university research findings are patented and put into commercial use. The research-to-commercialization cycle has significant economic benefits for places, including the spinoff of companies (which often locate themselves next to the university from which they spun out of), hiring of local residents, attraction of in-migrants to an area, and development of local supply chains and regional clusters.¹⁶ Land-grant universities are also known for the dedicated mission they have in supporting agricultural research and extension efforts across states.

RPUs, for their part, are a diverse set of schools, but many share some general characteristics. They conduct research, but in general, it tends to be more applied research, with an emphasis on local or regional needs.¹⁷ As a result, RPUs tend to put less emphasis on technology transfer and commercialization, and a greater emphasis on other aspects of higher-education-led economic and community development, such as developing a skilled regional labor force, acting as a major employer, providing financial resources for the community through procurement, and supporting regional infrastructure.¹⁸ That’s not to say that RPUs don’t play a role in firm development; evidence suggests that RPUs can promote small business incubation for communities.¹⁹ This is important for bolstering job growth and preventing regional out-migration.

RPUs also tend to be more accessible and affordable than public R1 or land-grant universities. By one count, 43% of RPUs have an open-access mission, meaning they provide educational opportunities to nearly any student who applies.²⁰ This means they provide access to groups who are traditionally underserved by public R1 and land-grant universities, and in many cases are important sources of upward mobility for individuals in those groups.²¹

These distinct missions mean that while federal policymakers have a vested interest in providing greater support for RPUs, they should do so in a way that preserves their community-focused role and student access mission. In other words, rather than try to turn every public college into an R1, federal policymakers should instead provide resources to support the types of community and economic development efforts that RPUs are already doing.

The precedent for federal support for higher-education-led community development

There is extensive precedent for federal support of both higher education institutions and distressed communities. For example, the Higher Education Act of 1965 (HEA) has several programs designed to support specific classes of universities. The Strengthening Institutions Program—the original HEA program for supporting higher education institutions—supports colleges and universities that have low educational and general expenditures and that support a high share of low-income students.²² Other existing programs support schools that enroll a large share of underrepresented students, including HBCUs, TCUs, Native American-Serving Nontribal Institutions, Alaska Native and Native Hawaiian-Serving Institutions, Asian American and Native American Pacific Islander-Serving Institutions, Predominantly Black Institutions, and Hispanic-Serving Institutions.²³

A recent proposal by McClure and others for the Alliance for Research on Regional Colleges called for the federal government to establish a “Rural Serving Institution” designation.²⁴ This would be distinct from the above HEA programs, in that support would be specifically tailored to support rural public colleges’ regional service missions and enhance their capacity to address public health, educational, and economic

challenges in the regions they serve. Here too there is a statutory precedent in the HEA: Part Q of the act was designed to provide grants to rural-serving colleges and universities, with the goal of increasing educational attainment and improving economic development in rural communities.²⁵ However, Congress has never funded this provision.²⁶

While many of the schools that are eligible for these existing HEA programs are situated in distressed communities, none of these programs—except for the proposed Rural Serving Institutions designation—has an explicit economic and community development mission. As such, there is an opening for more concerted federal intervention to support university-based economic and community development centered on distressed places.

One existing federal program does allow universities to support distressed communities. The Economic Development Administration's (EDA) University Center Economic Development Program provides funding to establish and operate University Centers focused on building regional economic ecosystems in areas of chronic economic distress.²⁷ University Centers have a specific focus on supporting innovation and high-growth entrepreneurship. They typically work with local governments and nonprofits, primarily by providing expertise and technical assistance to support the creation of regional strategies and the implementation of projects to promote economic development. Types of expertise and technical assistance that University Centers provide include workforce training programs, applied research centers, technology commercialization, feasibility studies, market research, and economic impact analysis training.

However, this program is too small, too narrowly focused, and supports too few schools. The EDA administers the University Centers program as a competitive grant program. In the most recent competition in FY 2018, the EDA was allocated just \$7.4 million for the program, which it distributed to 20 colleges and universities in the South and Mountain West.²⁸ At an average of just \$370,000 per award, the funding is too insufficient to have a transformative effect for distressed places. Likewise, while the regional planning support provided through the University Centers program is a value add for communities, the program's focus on workforce

development, research, and technology transfer is too narrow. There are other ways that universities can support economic and community development, and those should be encouraged too. Finally, while there are over 60 universities that participate or have participated in the University Centers program, many of them are land-grant or R1 universities that already receiving extensive federal funding.²⁹ This means the program leaves out a substantial number of RPUs that serve distressed communities.

Currently, the U.S. provides a significant amount of federal support for large universities, both public and private, such as R1s and land-grant institutions that are situated in distressed communities. For example, R1 research universities receive robust federal funding through so-called "indirect costs," which are the portion of federal research funding that goes to cover general university overhead. Indirect costs can sometimes be as high as one-third or more of the total federal grant.³⁰

This federal research funding has important benefits for surrounding communities. One example of this is when universities procure supplies (either directly for research or as part of their indirect costs) from local vendors. In other cases, federally funded research is expected to advance positive societal outcomes, such as through "broader impact" provisions that are now used by the National Science Foundation and other federal research agencies. Such broader impacts include developing a diverse, globally competitive workforce; increasing the economic competitiveness of the United States; encouraging the full participation of women, persons with disabilities, and underrepresented minorities; and improving the well-being of individuals in society.³¹

Land-grant universities, meanwhile, received significant federal investments early in their history in the form of land scrips that allowed many of them to build up significant endowments.³² These land scrips are complemented by annual formula funds that are designed to support research and extension efforts in support of state agriculture, food, and forestry systems, as well as issues affecting socioeconomic welfare in urban and rural communities.³³

At the same time, policy proposals under consideration by Congress, such as President Joe Biden's infrastructure plan and the U.S. Innovation and

Competition Act, would direct further dedicated funds to large research universities in metropolitan areas that aren't among the highest-growth "superstar" places.³⁴

The robust federal research and extension funding that R1s and land-grant universities receive does not exist for RPUs. While RPUs do conduct research, it is not

nearly at the same level as large R1s. As a result, these schools and the communities they serve are largely left out of the flow of federal dollars that support communities hosting an R1 or land-grant university. Given that, there is impetus for action to create a dedicated federal funding stream to support RPUs in distressed communities.

How federal research funding perpetuates university-level inequalities

The "indirect cost" provisions of federal grants are reimbursements that the federal government provides to universities for the costs of doing business that are not readily identifiable with a particular activity or project, but are necessary for the execution of a grant. They include costs such as utilities, telecommunications, laboratory maintenance, and the salaries and expenses for workers in finance, accounting, and other organizational support functions. Because the federal government issues tens of thousands of grants annually, and universities may receive hundreds of grants, it is too time- and cost-intensive to break down indirect costs on a grant-by-grant basis. As a result, indirect costs are instead calculated as a certain percentage of the grant amount.³⁵

Indirect costs are determined on a university-by-university basis, subject to caps by some federal agencies.³⁶ In general, the more grant funding a university receives, the more indirect cost support that university will receive. Because the largest research universities receive hundreds of times more federal research funding than other schools, it means they also receive significantly more operating support in the form of indirect cost reimbursements.

To illustrate this divergence, it is helpful to compare two example universities. In FY 2019, Wayne State University, a public R1 university in Detroit, received over \$118 million in total federal research funding.³⁷ Wayne State's indirect cost rate for federal grants is 53%, which means that they receive an additional 53% on top of their direct grant costs to cover indirect costs.³⁸ That implies that Wayne State may have received around \$77 million in funding to cover direct costs, as well as up to \$41 million to cover indirect costs. However, because of certain direct cost set-asides known as "exclusions," the actual indirect cost number may be lower. According to the National Institutes of Health (NIH), just less than 28% of all research funding they issued covered indirect costs—a number that has remained unchanged for over a decade.³⁹ At that rate, it would mean Wayne State received just under \$32 million in funding for indirect costs. In short, federal research funding may provide Wayne State a \$32 million or more subsidy for operating costs.

For comparison, in FY 2019, the University of Michigan-Flint received just \$122,000 in federal research grants.⁴⁰ The University of Michigan system has an indirect cost rate of 56%, which would imply that it received just over \$78,000 to cover direct research expenditures, and just less than \$44,000 to cover indirect costs.⁴¹ Using the NIH's calculation that 28% of all funding goes to indirect costs, it would imply that University of Michigan-Flint received just \$34,000 in funding for indirect costs. In short, Wayne State, an R1 in a distressed Michigan community, received nearly 1,000 times more federal funding subsidizing its operating costs than the University of Michigan-Flint, an RPU operating in a different distressed community in the state.



As previously mentioned, there are two other classes of land-grant universities: 1890 land-grant institutions, which are historically Black colleges and universities (HBCUs), and 1994 land-grant institutions, which are Native American Tribal Colleges and Universities (TCUs). While these schools receive funding from the federal government, it is at substantially lower levels than land-grant institutions established under the 1862 Morrill Act. The Congressional Research Service has noted that annual research funding for 1890 institutions should not be less than 30% of the research funding that 1862 institutions receive. However, annual appropriations for 1890 institutions

have never met this threshold, and in fact totaled only 22% in FY 2019.⁴² Similarly, appropriations for capacity grants for extension programs at 1890 institutions are required by law to be at least 20% of the size of appropriations provided for 1862 institutions. But here too, Congress has never met its own threshold. In FY 2019, appropriations for extension programs at 1890 institutions were just 15% of the amount that extension programs at 1862 institutions received.⁴³ As a result, these schools do not receive the same level of federal inflows as the largest R1 and 1862 land-grant institutions, and thus have less capacity to support the communities they serve.

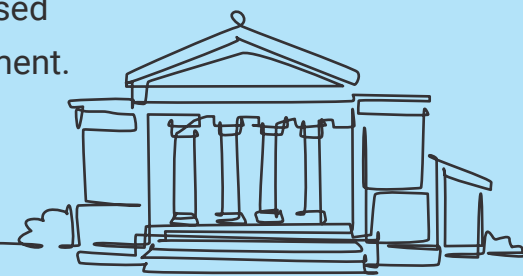


*Northwestern State University.
Photo credit: Renelibrary via Wikimedia Commons.*



3. Policy design

To leverage more universities as anchor institutions for distressed communities, the federal government should establish a new distressed-communities-serving designation for four-year public universities that are not currently R1 or land-grant universities. Receiving this designation would make schools eligible for planning grants of several hundred thousand dollars to design robust interventions to support local community and economic development, as well as implementation grants worth between \$25 million and \$50 million over five years to enact projects related to physical redevelopment, digital infrastructure, community-focused research, or other forms of economic and community development.



Institution eligibility

Which colleges and universities should be eligible for this distressed-community-serving designation? Given the sheer number of both universities and distressed communities in the U.S., spreading resources too thin among too many schools will likely not leave enough funding for any universities to make a substantial difference.

As mentioned in previous Brookings work, while private universities can have many of the same economic impacts as public universities, public universities often have a dual focus: not only educating the state's population, but also committing to the prosperity of the places where they are situated. Furthermore, policymakers have significantly more levers available to enhance public universities' well-being, hold them accountable to meeting policy goals, and ensure they fulfill the public interest.⁴⁴ As such, it would make sense to prioritize public universities in this program.

Not only that, but RPUs have other benefits for communities that make them worthy of prioritization. For one, while RPUs vary significantly in size, in general they tend to be larger than other universities (particularly private universities), which gives them a larger local and regional economic impact.⁴⁵ RPUs have also historically had more stable budgets because of state appropriations, giving them more consistent spending streams than other universities.⁴⁶ These factors could make them particularly reliable as anchor institutions.

As previously noted, R1 and land-grant universities already get significant federal funding to support economic and community development, including through both indirect costs built into NIH and NSF grants as well as NSF broader impact provisions, which require NSF-funded schools to demonstrate the impact they have on surrounding communities. Some also participate in the EDA University Center program.

On the other end of the spectrum are community colleges, many of which are situated in distressed communities. As previous Brookings research has noted, while community colleges can serve as anchor institutions for communities, their campuses are often smaller than four-year universities, with fewer facilities such as dormitories or lab space. Likewise,

they conduct minimal research, and primarily teach first- and second-year students. Community colleges are also significantly integrated into the U.S. workforce development system, and as a result, receive substantial federal funding through programs such as the Workforce Innovation and Opportunity Act in a way that four-year public colleges do not.⁴⁷ In this regard, community colleges are both less ideal candidates to act as anchor institutions, and also better able to access federal dollars, than many public four-year colleges.

Given these parameters, this analysis proposes that colleges or universities could become designated as "distressed-community-serving institutions" if they:

- Are a four-year public college or university legally authorized within their state to award bachelor's degrees, and:
 - Are not a public R1 university or an 1862 land-grant institution
 - Have a physical campus (i.e., are not an exclusively online or distance-education school)
 - Are not a federal service academy or state military or maritime college
- Are accredited or pre-accredited by a Department of Education-recognized national or state accrediting agency
- Are located within one of the 50 states, Washington, D.C., Puerto Rico, or other U.S. territories
- Are situated within a distressed community or within the same county as Native American tribal land

Under this definition, 1890 land-grant institutions (HBCUs) would be eligible to participate, but 1994 land-grant institutions (TCUs) would not. This program would not serve TCUs because they do not receive state funding and most are not four-year schools. However, many TCUs are situated within or adjacent to distressed communities. As such, Congress should consider enacting a parallel program to support distressed-community-serving TCUs. Congress should also do much more to fulfill its trust and treaty education obligations to tribes, including by meeting TCUs' urgent existing funding and infrastructure needs.⁴⁸

Policymakers have a variety of considerations for defining "distressed community." Existing federal

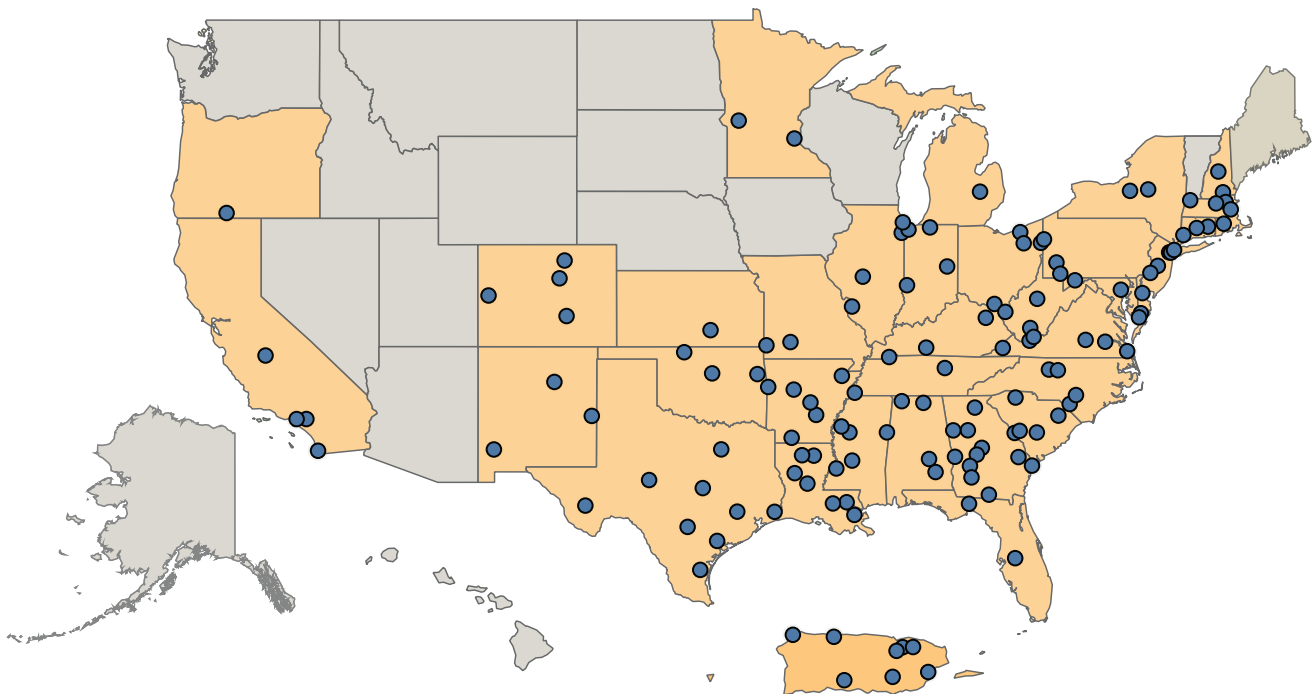
programs generally use census tracts as the baseline for defining distressed communities. However, many census tracts are small enough in size that a college or university can account for the entirety of its land area. ZIP codes provide a generally larger spatial area than census tracts, but a smaller one than counties, and so have the potential to approximate the geography that a higher education institution—particularly an RPU—can most directly affect. However, ZIP codes suffer from a key shortcoming: They’re designed around postal routes, and so typically aren’t designed to capture the flow of economic activity. As a result, they have historically not been used as a baseline for any federal funding policies.

Likewise, full-time students can significantly skew the demographics in both census tracts and ZIP codes. Policymakers could minimize these distortions by structuring distressed-communities-serving eligibility based on whether any census tract or ZIP code *adjacent* to the one containing the school was distressed. Policymakers could also consider using median family income rather than median household income as a measure of distress, minimizing the distortionary effects of households comprising only full-time students.

Finally, public colleges that are situated within the same county as Native American tribal land should be made eligible. Due to the extensive Native American land expropriations that the U.S. government used to establish its public higher education system, ensuring that public universities support Native American economic and educational development should be a core obligation of the federal government.⁴⁹ At the same time, because of historical land allotments, many non-Native American people live on Native American reservations. In some cases, Native American reservations do not qualify as distressed due to the large number of non-Native American residents, even as Native Americans continue to lag non-Native Americans in nearly every economic indicator in their own homelands.

To provide an approximate illustration of which schools could potentially be designated as “distressed-community-serving,” this analysis leverages Census Bureau median family income data. For schools situated in metropolitan or micropolitan statistical areas (generally abbreviated as MSAs), this analysis uses ZIP-code-level family income data. For schools situated in non-MSA counties, this analysis uses

Figure 1. Distressed-community-serving RPUs are mostly concentrated in the Northeast, Midwest, Southeast, and Puerto Rico



Source: Brookings analysis of American Community Survey data



Grant design and details

To fund distressed-communities-serving colleges and universities, Congress should leverage a formula grant program with safeguards to ensure that federal funding supplements rather than supplants state funding. Fortunately, there are a variety of existing federal formula grant precedents that would work as a model for this process.

One of the most commonly used formulas in other federal grant programs is a two-step process to first certify and then fund schools. A two-step process of certification and funding is used by other Higher Education Act grant programs, such as the Strengthening Institutions Program, which supports institutions with a high proportion of low-income students. However, to make this program as accessible as possible, funding should be made available for all schools the federal government deems eligible as distressed-community-serving institutions. In this regard, the program would function more as an entitlement than a challenge grant.

First, the federal government would automatically designate schools as a distressed-community-serving institution if they are located within a distressed community or in the same county as Native American tribal land. Any institutions that feel they are eligible but were not included in the initial designation would then have a period to petition for inclusion. This would be particularly important if the federal government decided to make schools adjacent to distressed communities or Native American tribal land eligible.

Once they receive the designation, schools would be notified and given the option to accept planning funding to design projects to support economic and community development in the distressed communities they serve. Planning grants could be one- or two-year grants worth up to \$100,000 per year to help universities defray the cost of putting together a grant implementation plan. A grant of this size would be large enough to allow universities to hire one or two dedicated staff for the duration of the application process. This would be particularly valuable for schools that have less robust development and grant application support offices.

Since many RPUs have threadbare grant application operations, this program would also benefit from additional resources that provide technical support to

county-level family income data. For schools situated in states where the median family income is above the national median family income, eligibility is based on how far the local median family income is below the state median family income, to avoid penalizing schools in high-cost states. For schools in states where the median family income is below the national median family income, eligibility is based on how far the local median family income is below the national median family income, to be more inclusive of schools in low-income states. The cutoff used to qualify as distressed is a median family income 30% below the relevant threshold. For more information on the methodology used to generate this list of institutions, see this report's appendix.

Among the 445 institutions in the 50 states, Washington, D.C., and Puerto Rico that are not R1 or land-grant universities and meet the criteria above, the methodology used in this analysis identifies 141 that are situated in distressed communities; 133 are situated in MSAs and eight are in non-MSA counties.

These universities are spread across 108 MSAs in 34 different states and Puerto Rico. Including Puerto Rico, they are embedded in 100 different congressional districts.

This directional illustration does not include several institutions that are not within a distressed community but are within the same county as a Native American reservation, such as East Central University on the Chickasaw Nation Reservation in Oklahoma, or Lewis-Clark State College, which is located in the same county as the Nez Perce Reservation in Idaho. As a result, the total number of potentially eligible universities is higher than shown.

schools for grant implementation plans. In this regard, it will be important for federal policymakers to not only allocate funding to schools themselves, but also to the Department of Education or Economic Development Agency (wherever the program is housed) to provide institutional support, capacity-building, and to aid in knowledge capture and sharing best practices across schools.

As another way to enhance institutional capacity, eligible schools situated in metropolitan areas or states with multiple distressed community-serving institutions could choose to coordinate their projects and submit joint applications. Doing so could allow schools with less grant application capacity, or that may be less aware of ongoing federal policy developments, to leverage the resources of better-situated schools in the state. It could also potentially increase the scale and impact of certain projects, such as those related to public health, digital infrastructure, or other chronic needs across distressed communities. Finally, doing so could also be useful to help schools integrate this funding into existing strategic plans, either on a campus or system-wide level.

In their implementation plans, eligible institutions would provide a detailed explanation of the projects they will use their grant money to enact and demonstrate how those projects would support both short-term and longer-term economic and community revitalization in their distressed community.

Once the federal government approves an institution or consortium of institutions' implementation plan, institutions would be eligible to receive implementation grants to enact their plan. Implementation grants would be more significant grants that would fund the investment being made in the distressed community. These grants could be between \$25 million and \$50 million per institution, paid out over a project period of five years. Schools would not need to use the entirety of their implementation grant funding for just one use. For example, they could leverage part of it to support broadband expansion, while using another portion to scale up local business development.

One major consideration for policy design is that it must be done in a way that minimizes opportunity

for states to supplant state funding with federal funding. If state legislatures anticipate that public higher education institutions in their state will receive permanent federal funding, they may choose to reduce their own higher education appropriations and let the federal government make up the difference. In this regard, implementation grants should be sure to include state maintenance-of-effort requirements to prevent these grants from becoming counterproductive. Any maintenance-of-effort provisions should be carefully structured. In certain cases, state legislatures or governors may, for either budget or political reasons, decide they do not want to meet state funding requirements for a federal program that bypasses state legislatures and provides funding directly to schools. This could end up penalizing higher education institutions for the actions of their state legislatures or governors, who they cannot control.

Given that, policymakers should look to recent precedent around maintenance-of-effort provisions. For example, it could extend the maintenance-of-effort provisions it established in the American Rescue Plan Act, which required that states maintain support for higher education spending in FY 2022 and FY 2023 at the same proportion of overall state spending as the average of the three-year period from FY 2017 to FY 2019 in order to receive federal funding.⁵⁰ Congress could extend this provision to cover the full life of this policy. In addition, Congress could include a complementary provision forbidding states from reducing funding for distressed-community-serving institutions more than the average of other public universities in the state.

At this size, if 150 schools received implementation grants (assuming several schools in counties with Native American tribal lands were approved), it would result in a cost of up to \$1.5 billion per year for five years. For context, in FY 2019, the federal government appropriated nearly \$1.5 billion for programs to support land-grant universities, and nearly \$45 billion to higher education institutions for research and development. In FY 2018, the federal government spent over \$28 billion on Pell Grants. So, \$1.5 billion is a relatively small sum compared to other examples of federal investment in higher education.

Approved funding uses

Universities could leverage grants for a variety of different types of projects. While either the Department of Education or the EDA would have final discretion on what types of project should be eligible, examples could include:

PHYSICAL REINVESTMENT IN DISTRESSED COMMUNITIES

- Redeveloping commercial buildings to revitalize retail corridors
- Constructing residential buildings for students,

faculty, and staff, as well as community residents

- Including working with for-profit and nonprofit developers, with a focus on constructing both market-rate and affordable housing available to non-university-affiliated residents to grow local housing supply
- Constructing and operating community cultural institutions such as museums, theaters, or arts centers
- Constructing facilities such as laboratories and libraries for joint use with communities
- Improving transit options in the surrounding community

Cleveland State University leverages its footprint to support downtown Cleveland

While many schools today support economic and community development through their physical footprint, that was not always the case. One example of how schools can leverage their physical footprint to promote economic and community development in distressed communities comes from Cleveland State University (CSU) in downtown Cleveland.

In the 1970s and 1980s, CSU was a commuter campus. But as Cleveland's local economy pivoted from manufacturing to knowledge work in the 21st century, CSU has taken on a more robust role supporting economic and community development in surrounding neighborhoods. By redesigning the edge of its campus—including by increasing signage and making changes to buildings and the landscape—CSU improved walkability downtown, merging the campus with the greater city.

In 2008, the Greater Cleveland Regional Transit Authority opened its first bus rapid transit system. CSU sponsored several stops along its campus, connecting the university with major employers and other anchor institutions downtown and on the east side of the city, such as the Cleveland Clinic and Case Western Reserve University. The city has also been redesigning a major artery near CSU, East 22nd Street, to create a more bike- and pedestrian-friendly atmosphere around the campus.⁵¹

By building student housing around campus, CSU has brought more residential—and international—students to downtown Cleveland, a region that had undergone decades of depopulation. CSU is also adjacent to Playhouse Square District, the city's main performing arts center. CSU's proximity allowed the school to conduct a \$40 million rehabilitation of three small historic theaters and the Middough Building to create its Arts Campus. The Arts Campus project created classrooms, rehearsal space, art studios, and offices adjacent to the third-largest performing arts complex in the world. For the Playhouse Square neighborhood, which had been hit hard by population loss in recent decades, the project provided another source of investment and foot traffic that has turned it into a local economic driver in recent years.⁵²



ENTREPRENEUR AND BUSINESS DEVELOPMENT SERVICES, WITH A FOCUS ON UNDERREPRESENTED GROUPS

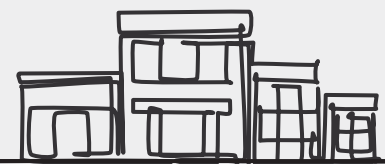
- Supporting entrepreneurs and early-stage companies through incubators and accelerators, entrepreneur financing services, and small business development services, among others
- Expanding venture capital and other equity investment for high-growth firms associated with the university, with an emphasis on women- and minority-owned firms
- Providing patient capital for advanced-industry sector startups associated with the university that have the potential to bring long-term economic development benefits to the community

Penn State Behrend anchors the Northwest Pennsylvania Innovation Beehive Network

Northwest Pennsylvania is a region with a strong manufacturing legacy, albeit one that has faced significant challenges in recent decades as offshoring restructured U.S. manufacturing. Since 1980, the number of manufacturing jobs in the region has been cut in half, creating significant negative economic impacts on communities such as Erie.⁵³ To adapt to these changing economic circumstances, regional leaders have turned to investments in the knowledge economy to replace some of the economic activity lost as manufacturing declined.

Recognizing that Northwest Pennsylvania did not have an R1 university on the scale of Philadelphia, Pittsburgh, or State College, Penn State Behrend partnered with three other local universities (Edinboro University, Gannon University, and Mercyhurst University) and the Erie County Public Library to form the Northwest Pennsylvania Innovation Beehive Network. Each “hive” focuses on a specific area of innovation or entrepreneurial support. Penn State Behrend’s Innovation Commons focuses on data analytics, sensor management, virtual and augmented reality, and app development. Edinboro University’s Center for Branding and Strategic Communication provides marketing services, digital design, and video production. Gannon University’s Center for Business Ingenuity provides business consulting and is piloting an intensive case management service for entrepreneurs. Finally, Mercyhurst University’s Innovation Entente Lab provides market analysis and business intelligence services.⁵⁴

Since it formed in 2014, the Innovation Beehive Network has supported more than 400 entrepreneurial projects.⁵⁵ The program was initially seeded with funding from the Erie County Gaming Revenue Authority, the U.S. Economic Development Administration, and Invent Penn State. Later funding came from the Appalachian Regional Commission, matched by additional funding from the universities.⁵⁶



ENHANCING JOB CREATION AND CONNECTING LOCAL RESIDENTS TO EMPLOYMENT OPPORTUNITIES

- Developing industry-university partnerships to bring jobs in specific areas of academic strength to the local community
- Financing degree apprenticeships and other work-based learning pathways to help underemployed

community members access employment opportunities with industry partners and other local employers

INVESTING IN ESSENTIAL DIGITAL INFRASTRUCTURE SUCH AS BROADBAND

- Creating and maintaining municipal broadband networks, managed jointly with the university

Northern Michigan University offers high-speed internet for Michigan's Upper Peninsula

Given the sparse population on Michigan's Upper Peninsula, internet availability can be scarce and expensive. In an interview with *The Detroit News*, one resident revealed that it would cost \$700,000 to run cable internet 3 miles to his home.⁵⁷

Northern Michigan University's (NMU) Educational Access Network (EAN) is aiming to change that. EAN is a wireless LTE network managed by the university that provides high-speed internet service to residents of communities across the Upper Peninsula. The network began in 2008, when NMU was providing wireless internet access for students within a 25-mile radius of their campus. NMU worked with the Federal Communications Commission (FCC) to leverage a band of spectrum known as Educational Broadband Service (EBS) to begin offering similar service elsewhere on the peninsula.⁵⁸

EAN works by trading the use of wireless network space to organizations that control infrastructure (such as water tanks or tall buildings) where NMU can mount antennas. Once mounted, these antennas provide LTE-quality wireless internet over a 9-mile radius.⁵⁹ So far, NMU has installed 49 of these transmitters, with 90 planned in total. Once all 90 are installed, the NMU network will cover the entire Upper Peninsula, providing service to over 21,000 miles of rural communities, 100,000 students, and six Native American nations.⁶⁰ In 2019, NMU got FCC permission to expand its network to hard-to-reach areas on Michigan's Lower Peninsula.⁶¹

Monthly plans cost from \$20 to \$35 per month, which is not only less than what wired internet would cost in the area, but is also less than many private telecommunications company plans in major metropolitan areas.⁶² Because the connection is based on the educational access network, subscribers who are not students are required to complete one learning module a year as part of their enrollment agreement, with learning modules offered on topics as diverse as time management for small business and the history of the American Civil War.⁶³



PROGRAMS TO IMPROVE UNIVERSITY AND COMMUNITY CAPACITY TO ADDRESS REGIONAL PUBLIC HEALTH OR ECONOMIC CHALLENGES

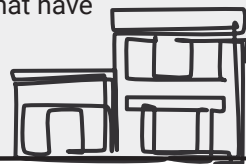
- Establishing health clinics or primary care facilities
- Recruiting and training local students that reflect the makeup of the community to become health professionals

UNC at Pembroke's mobile vaccine clinic helps Native Americans and other communities in need

Since the start of the COVID-19 pandemic, Native Americans have had the highest per capita rate of infection in North Carolina. Given this high level of risk, vaccine access is critical to saving lives. Half of all Native Americans in the state are citizens of the Lumbee Tribe, based in Robeson County and surrounding counties in the southern part of the state. However, despite more than a century of efforts, the Lumbee Tribe has never received federal recognition, and today is the largest state-recognized tribe in the United States. As a result, the Lumbee Tribe cannot access Indian Health Service programs or many other federal supports designed to counter the spread of COVID-19.⁶⁴

Beginning in March, University of North Carolina at Pembroke's (UNCP) College of Health Sciences leveraged federal CARES Act dollars to establish two mobile clinics to vaccinate local residents.⁶⁵ Originally known as Croatan Normal School, UNCP was founded in 1887 at the urging of the Lumbee people to train Native American public school teachers, and was limited to enrolling only Native American students. Throughout the 20th century, the school was transformed into a four-year public university that became part of the University of North Carolina system.⁶⁶ Today, 13% of students enrolled at UNCP are Native American, and many of the school's programs are relevant for Native American communities, such as the master in nursing's rural case manager specialty concentration.⁶⁷

Given its ties to the Lumbee Tribe, UNCP has prioritized vaccinating Native Americans and other hard-to-reach residents with its mobile clinics.⁶⁸ To do so, the clinics have partnered with churches and community organizations that serve Native Americans, other communities of color, and rural residents. By bringing vaccines to residents, the clinics reduce two significant barriers to vaccine access: time and distance. And the university's long ties to the Lumbee Tribe and other local communities foster a level of trust for vaccine recipients. The clinics are outfitted with a mobile doctor's office, and after the end of the pandemic they will be leveraged to conduct community health outreach. In doing so, these mobile clinics are not only supporting communities in need, but are also preparing nursing students for a career working with rural communities and other communities that have limited access to health care services.



EFFORTS TO IMPROVE POSTSECONDARY ENROLLMENT RATES FOR ELEMENTARY AND SECONDARY SCHOOL STUDENTS IN DISTRESSED COMMUNITIES

- Running elementary and secondary schools in partnership with local school districts, leveraging campus infrastructure, and other efforts

Western Washington University helps improve at-risk elementary students' performance

In 2012, the Washington State Legislature created the Collaborative Schools for Innovation and Success (CSIS) program, which was designed to create collaboration between the state's colleges and school districts in order to support at-risk and low-achieving students and improve the skills of educators.⁶⁹

The program was established as a pilot between three colleges and three school districts. One of the colleges was Western Washington University in Bellingham, which partnered with Washington Elementary, a public school in the Mount Vernon School District with a large population of Latino or Hispanic students and families. The collaboration was designed to close the opportunity gap between white students and Latino or Hispanic students in Washington Elementary. Washington Elementary worked to do this through increased family engagement, including family visits, family literacy nights, and adult English as a second language classes.⁷⁰ For its part, Western Washington University provided graduate interns to help in the school, hosted over 600 students for on-campus visits, and helped teachers graduate with an English language learner (ELL) endorsement.⁷¹

Over a six-year partnership period, Washington Elementary showed notable success in improving Latino or Hispanic student math scores and reducing the number of behavior office referrals. Western Washington University also reported a continuous gradual increase in teacher candidates graduating with an ELL endorsement and a greater number of former interns who are now working in high-need schools throughout the state. A strong partnership between the college and school district formed during the pilot, and this collaboration continued beyond the end of the state pilot program.⁷²



COMMUNITY-RELEVANT RESEARCH

- Conducting sustained research efforts focused on regional industry specialties, cultural-oriented research, and other immediate economic or local needs

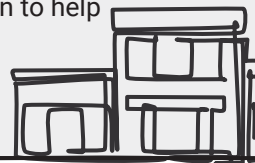
University of Michigan-Flint's research efforts helped the city navigate the water crisis

The Flint water crisis began in April 2014, when the city's source for drinking water changed from the Detroit water system (sourced from Lake Huron and the Detroit River) to the Flint River. A lack of corrosion controls caused lead from the city's water pipes to leach into drinking water, as well as possible Legionella bacteria. An estimated 6,000 to 12,000 children were exposed to high levels of lead in their drinking water, and an outbreak of Legionnaires' disease led to the death of 12 residents of Genesee County.⁷³ With the onset of the crisis, University of Michigan-Flint (UM-Flint) conducted a series of research and outreach projects to support Flint residents.

In early 2016, UM-Flint's Geographic Information Systems Center, under the direction of Dr. Marty Kaufman, released research that mapped all of the city's nearly 33,000 water service lines, including water pipes to individual homes, to identify buildings connected to the city's lead service lines.⁷⁴ The mapping effort identified the age of the pipes (older pipes are more likely to be made of lead) and, where possible, the materials that the pipes were made of. This project was critical for helping the city establish a program to identify the households most likely to contain lead pipes, and to prioritize replacing lead service lines for the most vulnerable households.

Later in 2016, a student team at UM-Flint, under the direction of Associate Professor of Computer Science Mark Allison, developed a prototype smartphone app for Flint residents. The project received \$150,000 in funding from Google, who worked with the UM-Flint team as well as the University of Michigan-Ann Arbor's Data Science Team to add mapping features and predictive analytics to the app.⁷⁵

These research efforts were just a fraction of the many community-centered efforts that UM-Flint took on to help the city and its residents navigate the five-year water crisis.



Other federal policy components

To make grants as equitable as possible and preserve and share best practices across institutions and communities, policymakers should also establish an Office of Distressed-Community Universities, under either the Department of Education or the Economic Development Administration. This office would manage the primary responsibilities of the grant program, including certifying universities as "distressed-community-serving" and awarding grants.

However, the office would also take on additional responsibilities aimed at knowledge retention and sharing, including conducting project evaluations, memorializing best practices, and helping schools replicate and implement successful projects from elsewhere. The office could also design relevant regulations around the program, such as provisions to promote inclusive local procurement for projects.



Metropolitan State University of Denver.
Photo credit: Xnatedawgx via Wikimedia Commons.

4. Fiscal and economic implications

Grants to distressed-community-serving universities would have positive employment impacts for those communities and can serve as a base to further build around.

Employment multipliers from the Economic Policy Institute’s Josh Bivens provide insight into the potential employment impact this type of grant program could have by showing the number of full time-equivalent positions that would be created by a certain amount of investment in an industry. Figure 2 below illustrates the number of direct, indirect, and induced jobs created by several of the potential funding uses. As this figure demonstrates, job creation varies by how the money is spent. These job estimates are directional and mutually exclusive, illustrating the potential job impacts that would come if a full \$50 million grant were invested into a single category.

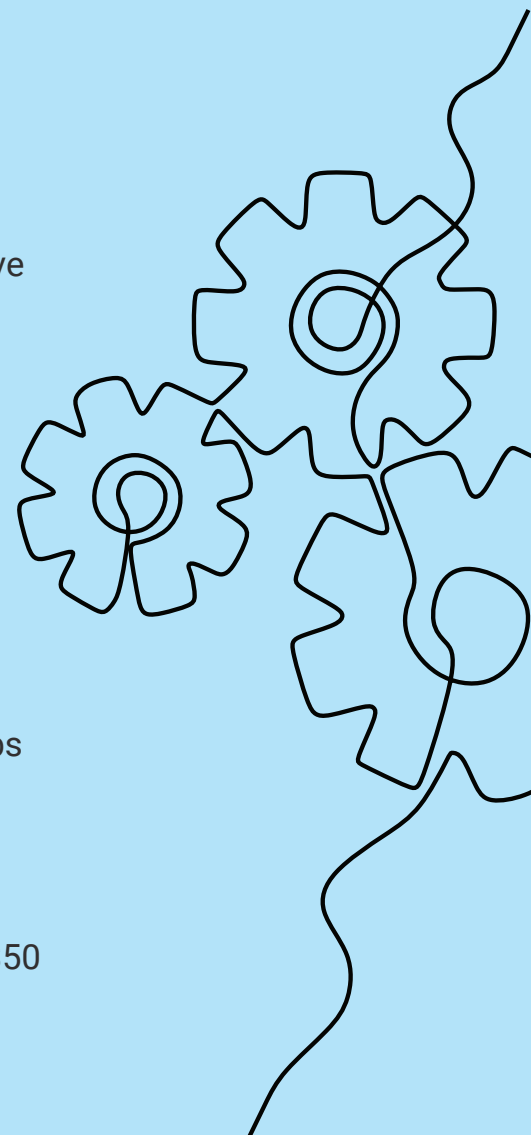
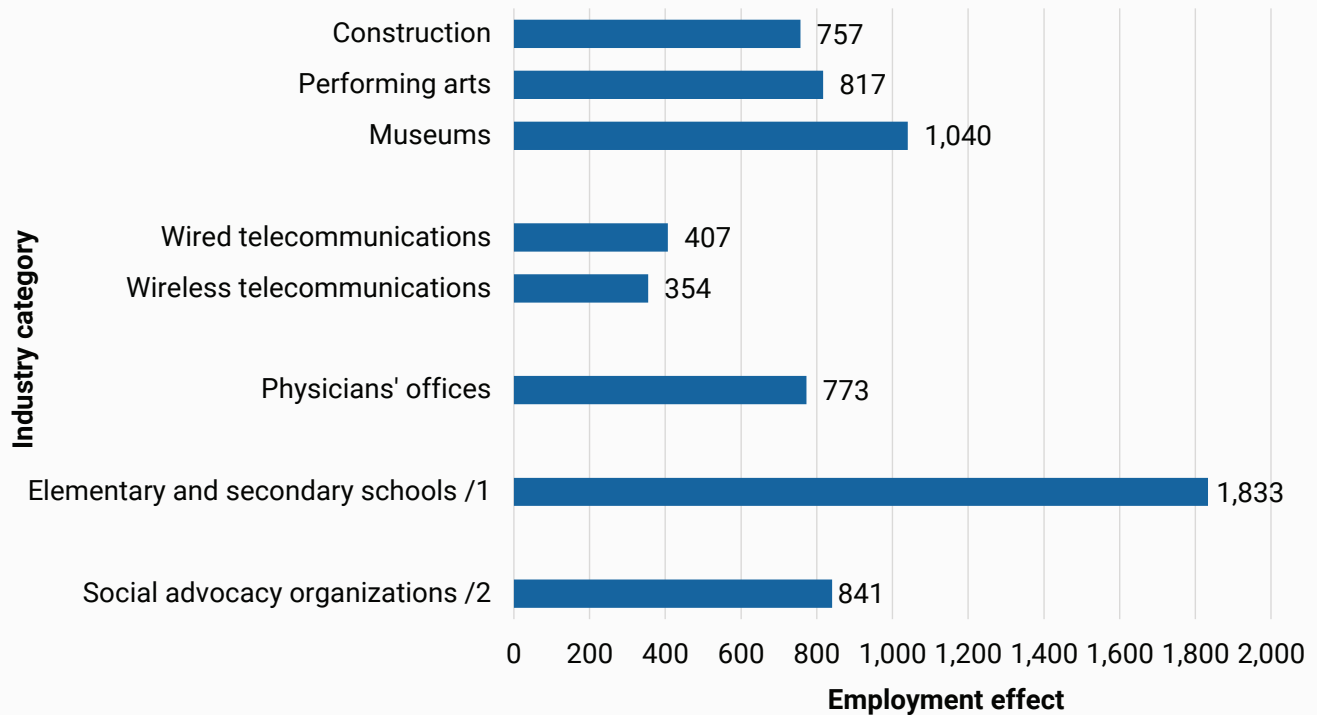


Figure 2. Employment effect from \$50 million grant

Direct, supplier, and induced



1. Because Bivens does not estimate public sector industries, this estimate uses private elementary and secondary schools (NAICS 6111).

2. Because there isn't a non-scientific research NAICS industry available, these estimates reflect grantmaking and giving services and social advocacy organizations (NAICS 8132).

Source: Brookings analysis of EPI data.

Complementing any federal grants with additional state, local, private, or philanthropic funding would increase the size and employment impacts of these projects.

Because these estimates are based on a fixed investment amount, investment in high-cost, high-salary uses (e.g., building out broadband networks) create correspondingly fewer jobs. The above numbers also don't consider the downstream effects that these investments can have. While \$1 of spending on broadband coverage expansion (wired and wireless telecommunications carriers) will create fewer jobs than other uses, establishing widespread internet coverage in an area will create a variety of job opportunities that wouldn't otherwise exist. For example, small businesses will have an easier time establishing an online presence and selling to

customers outside of their local area; entrepreneurs will have an easier time connecting to financing to scale up their operations and hire more people; and manufacturing firms and agricultural operations will be more readily able to adopt cutting edge digital technologies that can make them more competitive and expand their output.

Similarly, support for entrepreneurship and business development—particularly in high-growth and traded sectors—can promote substantial job growth. These effects can be magnified by industry-university partnerships, which can help communities take advantage of existing regional clusters. For its part, financing skill development programs such as degree apprenticeships in partnership with local firms can develop a skilled workforce for regionally important industries and connect workers that have faced historic

barriers to employment. Likewise, bolstering the quality of elementary education can lead to higher levels of overall educational attainment and higher income for individuals throughout their career. Expanding health care access can complement these investments by generating a healthier and more productive local workforce.

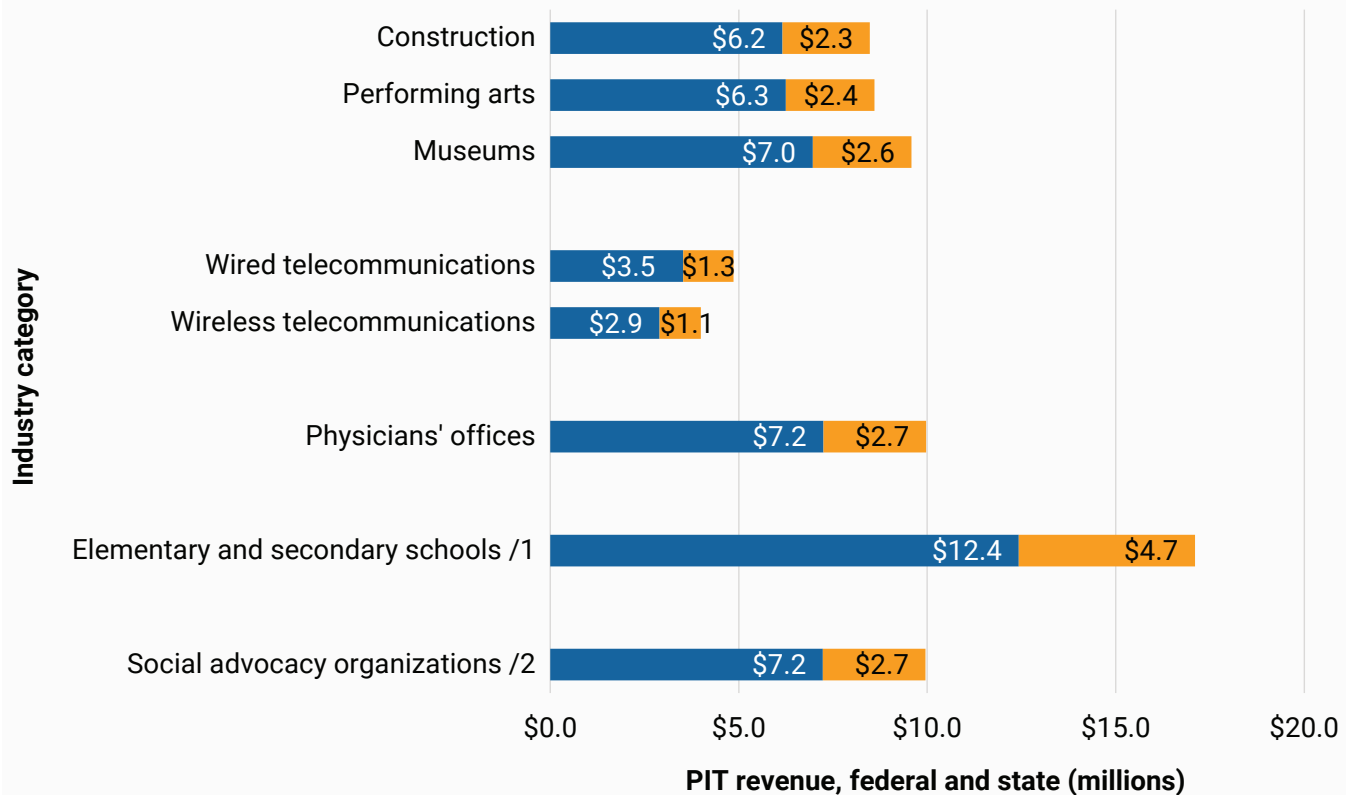
Meanwhile, “Main Street” business development in locally traded industries such as retail, food service, and hospitality can promote commercial corridors in downtowns, with important benefits for placemaking. These benefits can be further enhanced by amenities such as museums, theaters, or other cultural

institutions, which serve as community hubs and can draw in more businesses. Finally, support for locally oriented research can help solve long-standing social challenges and preserve a local community’s culture, which can improve residents’ overall quality of life.

It is more difficult to estimate the federal, state, and local fiscal effects of these grant programs, largely because universities are not-for-profit entities, and so are generally exempt from paying taxes. While some universities make payments in lieu of taxes, these payments are not universal and vary significantly from university to university.

Figure 3. Revenue effect from \$50 million grant

Federal and state



Note: federal PIT revenue assumes the actual average effective rate of about 13% and state PIT revenue assumes an effective PIT rate of 5%. Darker shades indicate federal revenue and lighter shades state revenue.

1. Because Bivens does not estimate public sector industries, this estimate uses private elementary and secondary schools (NAICS 6111).

2. Because there isn't a non-scientific research NAICS industry available, these estimates reflect grantmaking and giving services and social advocacy organizations (NAICS 8132).

Source: Brookings analysis of Emsi and BLS data

As a result, the best way to track the fiscal impacts of these grants is to estimate the income tax collections that would come from the jobs the grants create. Estimated above are directional revenue effects from several of the proposed grant uses. To get these estimates, this analysis assumes all workers in direct jobs created make the average salary in their industry, and workers in indirect or induced jobs pay the average U.S. annual compensation of approximately \$59,000.⁷⁶ All workers are assumed to pay the average effective U.S. federal tax rate of 13.3%.⁷⁷ This likely underestimates the taxes paid in higher-income industries such as telecommunications, and likely overestimates the taxes paid in lower-paying industries such as elementary education. Because most localities do not have personal income taxes, local revenues are not included. States have significant variance in their level of personal income tax, ranging from eight states

that levy no personal income taxes up to California's top marginal rate of 13.3% on income above \$1 million. This analysis assumes an effective state personal income tax rate of 5%.

Given these assumptions, a \$50 million investment could generate between \$2.9 million and \$12.4 million in federal income tax collections, and between \$1.1 million and \$4.7 million in state income tax collections. Here too, any revenue impacts could be higher over time, as downstream jobs and businesses return revenue to states and localities. Evidence also suggests that investment in higher education may reduce the need for government funding in other areas, such as transfer payments to low income families.⁷⁸ This will produce further positive fiscal effects for government at all levels.

Northeastern State University.
Photo credit: Caleb Long via Wikimedia Commons.





*Angelo State University.
Photo credit: Shutterstock.*

5. Conclusion

Policy decisions in the coming year could have substantial impacts on the trajectory of both the national recovery and local well-being in distressed communities for the next decade or more. It is crucial that policymakers learn from the mistakes of the last spatially uneven recovery—a recovery that also saw a significant weakening of investment in public higher education. A concerted federal effort to support regional public universities that serve distressed communities can help to both stem some of the higher education disinvestment that has happened on the state level while also promoting a more spatially and racially equitable recovery.

Appendix A

Defining ‘distressed community’

Considerations for policymakers

Policymakers have wide latitude to define what counts as a “distressed community,” and historically, many definitions have existed.

The simplest definition may be on a county or county-equivalent level. Most economic indicators can be found on the county level, making cross-county comparisons easier. Not only that, but many schools define their own service areas, generally using a multicounty definition. However, while counties are useful for demonstrating the geographic impact of school enrollment (as schools may draw students from multiple counties in the area), they’re less practical for measuring schools’ direct economic and community impacts, particularly for schools in more populated areas. Generally speaking, a school’s most significant economic impact will occur in the area immediately surrounding its campus. So, while county-level measurements may work well for schools in smaller counties, they may obscure important local variation in larger counties.

For example, Adams State University will have a disproportionately outsized impact on its home county of Alamosa County, Colo. (population 16,100) compared to Chicago State University in Cook County, Ill. (population 5.2 million). As a result, county-level data may be an appropriate measure of local distress for schools situated in non-MSA counties.

However, using county-level data in highly populated counties may obscure localized pockets of distress. For example, according to data from the Economic Innovation Group’s (EIG) Distressed Communities Index, a benchmark in the field, Cook County is classified as “comfortable,” which indicates it is in the 40% of the nation’s least-distressed counties. However,

Cook County is both segregated and unequal, with significant economic disparity by place and by race. Using EIG’s ZIP-code-level data instead shows that Chicago State University—a predominantly minority-serving institution on the city’s South Side—is in fact situated in a distressed community. In this regard, more granular data reveals the neighborhood-level economic variation that can occur in metropolitan and micropolitan areas.

Another recent policy proposal from Brookings by Tim Bartik defined distressed labor markets by commuting zones, which are similar in scope to metropolitan areas and based on the flow of workers into central business districts.⁷⁹ While commuting zones are useful for large-sale federal grant programs, they’re less so for university-based economic development. As with large counties, the economic impact of a single university is not going to be enough to cover an entire commuting zone.

Existing federal programs generally use census tracts as the baseline for defining distressed communities. For example, the federal Opportunity Zones program leverages census tracts in designating which communities are eligible to participate in that program. Smaller geographies such as census tracts can give a more accurate view of the local area that a school is likely to directly affect with its physical infrastructure investments. The city of Chicago is large enough that investments by Chicago State University alone are unlikely to transform the city in its entirety. However, the school’s investments can certainly influence the level of prosperity in its home census tract and the surrounding areas.

However, census tracts suffer from the opposite problem as commuting zones: Many are small enough in size that a college or university can account for

an entire census tract. As mentioned previously, ZIP codes provide a generally larger spatial area than census tracts, but a smaller one than counties, and so have the potential to approximate the geography that higher educational institution—particularly an RPU—can most directly affect. However, because they're designed around postal routes, they aren't structured to capture the flow of economic activity. As a result, they have historically not been used as a baseline for any federal funding policies.

In either case, full-time students can significantly skew the demographics in census tracts and ZIP codes containing higher education institutions. As mentioned previously, to minimize these distortions, policymakers could consider structuring eligibility based on whether any census tract or ZIP code adjacent to the one containing the school was distressed. Another option is to use median family income as a measure of distress rather than median household income, minimizing the distortionary effects of households composed of only full-time students.

Finally, policymakers should consider how to most effectively include institutions serving Native American communities, while recognizing that the history of land theft in the U.S. may make many of them otherwise ineligible. To do so, one option would be to make public colleges that are situated within the same county as Native American tribal land eligible. As mentioned above, because of historical land allotments and other forms of land theft, many non-Native American people live on Native American reservations. For example, Pontotoc County, Okla., home to East Central University as well as the headquarters of the Chickasaw Nation in Ada, is less than 20% Native American and is over 68% white.⁸⁰ Nez Perce County, Idaho, home to Lewis-Clark State College and the Nez Perce Reservation, is just 6% Native American and nearly 90% white; indeed, over 80% of the Nez Perce Reservation itself is white.⁸¹ As a result, even as Native Americans continue to lag non-Native Americans in nearly every economic indicator on their own homelands, the communities they are situated in often do not qualify as distressed. Making institutions that are situated in the same county as Native American tribal lands eligible for this program will help rectify some of these ongoing economic injustices.

How this analysis illustrates distressed-community-serving institutions

To provide an approximate illustration of which schools could potentially be designated as “distressed-community-serving,” this analysis leverages median family income data from the Census Bureau’s American Community Survey. For schools situated in metropolitan or micropolitan statistical areas (generally abbreviated as MSAs), this analysis uses ZIP-code-level median family income data. For schools situated in non-MSA counties, this analysis uses county-level median family income data. Because non-MSA areas are generally more sparsely populated than MSAs, universities there can have a significant economic impact over a larger land area than universities in more densely populated areas.

This methodology is not perfect. For example, many universities have their own ZIP code, either for their campus or even just for an individual mail delivery building—meaning there is no ZIP-code-level median family income data available. In those cases, the school’s ZIP code was recoded to the non-university ZIP code surrounding it. In cases where a school-only ZIP code was surrounded by more than one ZIP code, an adjacent ZIP code was used.

Some universities are firmly situated in a non-distressed ZIP code that is adjacent to a distressed ZIP code. While these universities were not counted as “distressed-community-serving” in this example analysis, they can still have a significant positive effect in supporting the distressed communities adjacent to them, and may be worth consideration for inclusion. Other universities are adjacent to Native American reservations, but the immediate area that the institution itself is in is not distressed. In this regard, this analysis may actually undercount the number of universities that would be potentially eligible.

Despite these caveats, this methodology provides a directionally correct estimate of the number of distressed-community-serving RPUs in the U.S. and the geography of these universities. [Click here](#) to download a list of potentially eligible universities.

References

- Alexander, Serena E., Candi Clouse, and Ziona Austrian, "Thinking outside the Higher Education Box: Expanding upon the Economic and Community Development Roles of Urban Universities to Create a Win-win Situation," *Journal of Economic Development in Higher Education* (1) (2017): 53-60.
- Association of American Universities and the Association of Public and Land-grant Universities, "Understanding the Costs of Federally Sponsored Research at Universities," (2013).
- Atkinson, Robert D., Mark Muro, and Jacob Whiton, "The case for growth centers: How to spread tech innovation across America" (Washington, Brookings Institution, 2019).
- Bartik, Timothy J., "Helping America's distressed communities recover from the COVID-19 recession and achieve long-term prosperity" (Washington: Brookings Institution, 2020).
- Chetty, Raj and others, "Mobility report cards: The role of colleges in intergenerational mobility" (Cambridge, Mass.: National Bureau of Economic Research, 2017).
- Crisp, Gloria and others, "Describing and differentiating four-year broad access institutions: An empirical typology," *The Review of Higher Education*, 42 (4) (2019): 1373-1400.
- Croft, Genevieve K., "The U.S. Land-Grant University System: An Overview" (Washington, Congressional Research Service, 2019).
- Government Accountability Office, "University Research: Policies for the Reimbursement of Indirect Costs Need to Be Updated" (2010).
- Hegji, Alexandra, "The Higher Education Act (HEA): A Primer" (Washington: Congressional Research Service, 2018).
- Howard, Greg, Russell Weinstein, and Yuhao Yang, "Do Universities Improve Local Economic Resilience?" (Urbana and Champaign, Ill.: University of Illinois, forthcoming).
- Klor de Alva, Jorge, "Is the University Next Door the Way to Upward Mobility?" (Washington: American Enterprise Institute, 2019).
- Lee, Robert and Tristan Ahtone, "Land-grab universities: Expropriated Indigenous land is the foundation of the land-grant university system," *High Country News*, March 30, 2020.
- Maxim, Robert and Mark Muro, "Restoring regional public universities for recovery in the Great Lakes" (Washington, Brookings Institution, 2020).
- McClure, Kevin R. and others, "Strengthening Rural Anchor Institutions: Federal Policy Solutions for Rural Public Colleges and the Communities They Serve" (Alliance for Research on Regional Colleges, 2021).
- Orphan, Cecilia M., "Public Purpose Under Pressure: Examining the Effects of Neoliberal Public Policy on the Missions of Regional Comprehensive Universities," *Journal of Higher Education Outreach and Engagement* 22 (2) (2018): 59-102.
- Orphan, Cecilia M. and Kevin McClure R., "Rural Anchor Institutions: How Regional Comprehensive Universities Contribute to Rural Community Wellbeing," Annual Conference of the Association for the Study of Higher Education (2018).
- Soo, David, "Envisioning A Regional Role: Comprehensive Universities and Conceptions of Their Regional Contributions." Ph.D. dissertation, University of Pennsylvania, 2011.

Endnotes

1. See, for example, Louise Sheiner and Gian Maria Milesi-Ferretti, "How many jobs is the US likely to add this year?" (Washington: Brookings Institution, 2021).
2. Robert D. Atkinson, Mark Muro, and Jacob Whiton, "The case for growth centers: How to spread tech innovation across America" (Washington, Brookings Institution, 2019).
3. See Clara Hendrickson and Mark Muro, "Will COVID-19 rebalance America's uneven economic geography? Don't bet on it." (Washington: Brookings Institution, 2020); see also: Mark Muro and others, "Remote work won't save the heartland," *The Avenue*, June 24, 2021.
4. Atkinson, Muro, and Whiton, "The case for growth centers."
5. Atkinson, Muro, and Whiton, "The case for growth centers."
6. Atkinson, Muro, and Whiton, "The case for growth centers."
7. Timothy J. Bartik, "Helping America's distressed communities recover from the COVID-19 recession and achieve long-term prosperity" (Washington: Brookings Institution, 2020).
8. Robert Maxim and Mark Muro, "Restoring regional public universities for recovery in the Great Lakes" (Washington, Brookings Institution, 2020).
9. Serena E. Alexander, Candi Clouse, and Ziona Austrian, "Thinking outside the Higher Education Box: Expanding upon the Economic and Community Development Roles of Urban Universities to Create a Win-win Situation," *Journal of Economic Development in Higher Education* (1) (2017): 53-60.
10. Maxim and Muro, "Restoring regional public universities."
11. Maxim and Muro, "Restoring regional public universities."
12. Kevin R. McClure and others, "Strengthening Rural Anchor Institutions: Federal Policy Solutions for Rural Public Colleges and the Communities They Serve" (Alliance for Research on Regional Colleges, 2021).
13. Greg Howard, Russell Weinstein, and Yuhao Yang, "Do Universities Improve Local Economic Resilience?" (Urbana and Champaign, Ill.: University of Illinois, forthcoming).
14. Howard, Weinstein, and Yang, "Do Universities Improve Local Economic Resilience?"
15. Maxim and Muro, "Restoring regional public universities."
16. For more information on the technology transfer and commercialization process, see Ross Devol, Joe Lee, and Minoli Ratnatunga, "Concept to Commercialization: The Best Universities for Technology Transfer" (Santa Monica, Cali.: Milken Institute, 2017).
17. David Soo, "Envisioning A Regional Role: Comprehensive Universities and Conceptions of Their Regional Contributions." Ph.D. dissertation, University of Pennsylvania, 2011; and Cecilia Orphan and Kevin McClure, "Rural Anchor Institutions: How Regional Comprehensive Universities Contribute to Rural Community Wellbeing," Annual Conference of the Association for the Study of Higher Education (2018).
18. Maxim and Muro, "Restoring regional public universities," citing Orphan and McClure, "Rural Anchor Institutions."
19. Cecilia M. Orphan, "Public Purpose Under Pressure: Examining the Effects of Neoliberal Public Policy on the Missions of Regional Comprehensive Universities," *Journal of Higher Education Outreach and Engagement* 22 (2) (2018): 59-102; and Orphan and McClure, "Rural Anchor Institutions."
20. Gloria Crisp and others, "Describing and differentiating four-year broad access institutions: An empirical typology," *The Review of Higher Education*, 42 (4) (2019): 1373-1400.

- 21.** Raj Chetty and others, “Mobility report cards: The role of colleges in intergenerational mobility” (Cambridge, Mass.: National Bureau of Economic Research, 2017). See also Jorge Klor de Alva, “Is the University Next Door the Way to Upward Mobility?” (Washington: American Enterprise Institute, 2019).
- 22.** Alexandra Hegji, “The Higher Education Act (HEA): A Primer” (Washington: Congressional Research Service, 2018).
- 23.** Hegji, “The Higher Education Act (HEA): A Primer”.
- 24.** McClure and others, “Strengthening Rural Anchor Institutions.”
- 25.** McClure and others, “Strengthening Rural Anchor Institutions.” For the statutory text of Part Q of the Higher Education Act, see here: <https://www.law.cornell.edu/uscode/text/20/1161q>.
- 26.** McClure and others, “Strengthening Rural Anchor Institutions”; see also Hegji, “The Higher Education Act (HEA): A Primer.”
- 27.** <https://www.eda.gov/programs/university-centers/>.
- 28.** <https://www.eda.gov/news/blogs/2019/04/01/spotlight.htm>.
- 29.** See here for a list of University Centers by state: <https://www.eda.gov/programs/university-centers/states/al/>.
- 30.** Association of American Universities and the Association of Public and Land-grant Universities, “Understanding the Costs of Federally Sponsored Research at Universities,” (2013), <https://www.bu.edu/dental-research/files/2011/07/Indirect-Costs1.pdf>; see also Government Accountability Office, “University Research: Policies for the Reimbursement of Indirect Costs Need to Be Updated” (2010).
- 31.** See, for example, <https://www.nsf.gov/od/oa/special/broaderimpacts/#:~:text=Such%20outcomes%20include%2C%20but%20are,scientific%20literacy%20and%20public%20engagement>, and <https://research.fas.harvard.edu/broader-impacts>.
- 32.** See Genevieve K. Croft, “The U.S. Land-Grant University System: An Overview” (Washington, Congressional Research Service, 2019). For an overview of the history of how the federal government expropriated Native American tribal land to fund land-grant university endowments, see Robert Lee and Tristan Ahtone, “Land-grab universities: Expropriated Indigenous land is the foundation of the land-grant university system,” High Country News, March 30, 2020.
- 33.** Croft, “The U.S. Land-Grant University System.”
- 34.** Both the American Jobs Act and the U.S. Innovation and Competition Act propose an influx of federal funding for universities participating in a University Technology Centers program, as well as investment of between \$10 billion and \$20 billion into 10 to 15 regional innovation hubs in heartland cities, each of which would be required to have an institution of higher education. For more on the American Jobs Plan, see here: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/>. For more on the Endless Frontier Act, see here: <https://www.congress.gov/bill/116th-congress/senate-bill/3832>.
- 35.** Association of American Universities and the Association of Public and Land-grant Universities, “Understanding the Costs of Federally Sponsored Research at Universities; see also <https://www2.ed.gov/about/offices/list/ocfo/intro.html> and <https://www.nsf.gov/bfa/dias/caar/indirect.jsp>.
- 36.** Association of American Universities and the Association of Public and Land-grant Universities, “Understanding the Costs of Federally Sponsored Research at Universities;” and Government Accountability Office, “University Research: Policies for the Reimbursement of Indirect Costs Need to Be Updated.”
- 37.** National Science Foundation, Higher Education Research and Development: Fiscal Year 2019; “Table 21: Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2019,” <https://nces.nsf.gov/pubs/nsf21314#data-tables>.
- 38.** https://research.wayne.edu/spa/pdf/dhhs_rate_agreement_sep_2020.pdf.
- 39.** National Institutes of Health, FY 2021 Congressional Justification, Overview Volume, <https://officeofbudget.od.nih.gov/pdfs/FY21/br/1-OverviewVolumeSingleFile-toPrint.pdf>.

- 40.** National Science Foundation, Higher Education Research and Development: Fiscal Year 2019; “Table 21: Higher education R&D expenditures, ranked by all R&D expenditures, by source of funds: FY 2019,” <https://nces.nsf.gov/pubs/nsf21314#data-tables>.
- 41.** <https://orsp.umich.edu/develop-proposal/budget-and-cost-resources/facilities-administrative-fa-costs-rates>.
- 42.** Croft, “The U.S. Land-Grant University System.”
- 43.** Croft, “The U.S. Land-Grant University System.”
- 44.** Maxim and Muro, “Restoring regional public universities.”
- 45.** Howard, Weinstein, and Yang, “Do Universities Improve Local Economic Resilience?”
- 46.** Howard, Weinstein, and Yang, “Do Universities Improve Local Economic Resilience?”
- 47.** Maxim and Muro, “Restoring regional public universities.”
- 48.** For an overview of TCU financial and investment needs, and requests from Congress, see: <http://www.aihec.org/what-we-do/legPriorities.htm>.
- 49.** Lee and Ahtone, “Land-grab universities.”
- 50.** Department of Education, “Guidance on Maintenance of Effort Requirements and Waiver Requests under the Elementary and Secondary School Emergency Relief (ESSER) Fund and the Governor’s Emergency Education Relief (GEER) Fund,” (2021), https://oese.ed.gov/files/2021/04/MOE-Chart_with-waiver-FAQs_FINAL_4.19.21_12pm.pdf.
- 51.** Alexander, Clouse, and Austrian, “Thinking outside the Higher Education Box.”
- 52.** Alexander, Clouse, and Austrian, “Thinking outside the Higher Education Box.”
- 53.** Ben Speggen, “Combing for Ideas: NWPB Innovation Beehive bringing buzz to Erie community,” Erie Reader, March 27, 2019.
- 54.** Penn State Behrend, “\$1.5 million grant to expand Behrend lab and Innovation Beehive Network,” October 15, 2020.
- 55.** Penn State Behrend, “\$1.5 million grant to expand Behrend lab and Innovation Beehive Network.”
- 56.** Penn State Behrend, “\$1.5 million grant to expand Behrend lab and Innovation Beehive Network;” see also Speggen, “Combing for Ideas.”
- 57.** Gregg Krupa, “Northern Michigan University helps hook up remote U.P. areas to internet,” The Detroit News, April 8, 2019.
- 58.** Krupa, “Northern Michigan University helps hook up remote U.P. areas to internet.”
- 59.** Fritz J. Erickson, “Providing Broadband to Rural America: How Educators with EBS Can Make the Difference,” Digital Beat, January 28, 2019.
- 60.** Krupa, “Northern Michigan University helps hook up remote U.P. areas to internet;” and Erickson, “Providing Broadband to Rural America.”
- 61.** Mike Janssen, “Michigan university gets go-ahead from FCC to build out educational broadband,” Current, July 26, 2019.
- 62.** <https://nmu.edu/ean/#plans>; see also Krupa, “Northern Michigan University helps hook up remote U.P. areas to internet.”
- 63.** <https://nmu.edu/ean/#learning>.
- 64.** Garrett Bergquist, “Lumbee Tribe Battles COVID-19 Without Federal Aid,” Spectrum News North Carolina, August 14, 2020.
- 65.** See Liz Schlemmer, “Mobile Clinics Help UNC Pembroke Deliver Vaccine To Rural Residents,” North Carolina Public Radio, March 11, 2021; see also McClure and others, “Strengthening Rural Anchor Institutions.”
- 66.** <https://www.uncp.edu/sites/default/files/2019-01/Campus%20Profile%202018%20Electronic.pdf>.
- 67.** For information on the demographics of UNCP see: <https://www.uncp.edu/about/quick-facts>. For information on the Rural Case Manager designation, see <https://www.uncp.edu/departments/nursing/graduate-msn-programs/rural-case-manager>; see also McClure and others, “Strengthening Rural Anchor Institutions.”

68. Schlemmer, “Mobile Clinics Help UNC Pembroke Deliver Vaccine To Rural Residents;” and Tim Pulliam, “UNC Pembroke mobile clinic aims to vaccinate American Indians,” ABC11 News, March 11, 2021.

69. <https://www.pesb.wa.gov/innovation-policy/grants-pilots/collaborative-schools-for-innovation-and-success/>.

70. Maria Flores and Madeleine Elsen, “Report to the Legislature: Collaborative Schools for Innovation and Success,” (Olympia, WA: Office of Superintendent of Public Instruction, 2019).

71. Flores and Elsen, “Report to the Legislature;” and <https://drive.google.com/open?id=1WRTFzhQ0mKXbY9m2xMfXk8tDLX313NR7>.

72. Flores and Elsen, “Report to the Legislature.”

73. Maggie Fox, “Flint Water Crisis: Feds Expand Programs to Help Kids Affected by Lead,” NBC News, March 2, 2016; and Kristen Jordan Shamus, “State: McLaren Flint was primary source of Legionnaires’ outbreak,” Detroit Free Press, May 30, 2018.

74. Robert Gold, “UM-Flint GIS Center Mapping Flint Water System’s Lead Service Lines,” UM-Flint News, January 28, 2016; and “New UM-Flint Research Shows Location of Lead Pipes in Flint,” UM-Flint News, February 22, 2016.

75. “Google, U-M to build digital tools for Flint water crisis,” UM-Flint News, May 3, 2016.

76. Average industry salaries are as follows: Construction: \$64,826; Performing arts companies: \$51,735; Museums, historical sites, and similar institutions: \$36,862; Wired telecommunications carriers: \$92,100; Wireless telecommunications carriers (except satellite): \$92,563; Offices of physicians: \$93,434; Elementary and secondary schools; private: \$43,616; Grantmaking and giving services and social advocacy organizations: \$72,611. National average compensation is \$59,209.

77. Average tax rate pulled from Erica York, “Summary of the Latest Federal Income Tax Data, 2021 Update” (Washington: Tax Foundation, 2021).

78. Howard, Weinstein, and Yang, “Do Universities Improve Local Economic Resilience?”

79. Bartik, “Helping America’s distressed communities recover from the COVID-19 recession and achieve long-term prosperity”.

80. <https://www.census.gov/quickfacts/pontotocountyoklahoma>, extracted June 9, 2021 (population estimates used American Community Survey vintage 2019 estimates).

81. County data: <https://www.census.gov/quickfacts/fact/table/nezpercecountyidaho/PST045219>, extracted June 9, 2021 (population estimates used American Community Survey vintage 2019 estimates); Reservation data: <https://www.census.gov/tribal/?aianihh=2445>; extracted June 9, 2021 (population estimates used American Community Survey 2015-2019 five-year estimates).

Acknowledgements

The Brookings Metropolitan Policy Program would like to thank the Joyce Foundation for their generous support of this analysis, and Sameer Gadkaree for his partnership throughout this project.

The authors would like to thank Joseph Parilla, Annelies Goger, and Alan Berube for providing valuable insights and feedback on early versions of the analysis and report. Thank you to Eli Byerly-Duke and Yang You for their support with data analysis and visuals, and to Max Niles for his support with revisions and editing. The authors would also like to thank the following colleagues for valuable support in producing the report and contributing to outreach efforts: David Lanham, Michael Gaynor, Alec Friedhoff, and Erin Raftery. Thanks to Luisa Zottis for layout and design.

Thank you to Tom Harnisch, Alisa Hicklin-Fryar, Andrew Koricich, and Barmak Nassirian for your helpful external feedback on early versions of this report. Thank you also to Ralph Ford, Kevin McClure, Cecilia Orphan, Michael Prebil, Ben Spегgen, and Lul Tesfai for providing critical input.

The Brookings Institution is a nonprofit organization devoted to independent research and policy solutions. Its mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations for policymakers and the public. The conclusions and recommendations of any Brookings publication are solely those of its authors, and do not reflect the views of the Institution, its management, or its other scholars. Brookings is committed to quality, independence, and impact in all of its work. Activities supported by its donors reflect this commitment.

About the Brookings Institution

The Brookings Institution is a nonprofit organization devoted to independent research and policy solutions. Its mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations for policymakers and the public. The conclusions and recommendations of any Brookings publication are solely those of its author(s), and do not reflect the views of the Institution, its management, or its other scholars. Brookings is committed to quality, independence, and impact in all of its work. Activities supported by its donors reflect this commitment.

About the Brookings Metropolitan Policy Program

The Brookings Metropolitan Policy Program delivers research and solutions to help metropolitan leaders build an advanced economy that works for all. To learn more, visit brookings.edu/metro.

For more information

Robert Maxim

Senior Research Associate
Metropolitan Policy Program at Brookings
rmaxim@brookings.edu

Mark Muro

Senior Fellow and Policy Director
Metropolitan Policy Program at Brookings
mmuro@brookings.edu

B | Metropolitan Policy Program
at BROOKINGS