

### **RESTORING REGIONAL PUBLIC UNIVERSITIES** for **RECOVERY** in the **GREAT LAKES**

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### **Executive summary**

While the health and economic impacts of the COVID-19 crisis have been ubiquitous, they have affected certain places and people disproportionately. Many communities had yet to fully recover from the last recession before the onset of the current downturn. Likewise, the explosion of recent protests around the country has highlighted the many dire disparities of access for Black Americans and other nonwhite citizens, including access to quality higher education.

These recent events have put the nation's oftenoverlooked regional public universities (RPUs) in the spotlight, both as unique sites of opportunity to address these challenges as well as institutions in an increasingly precarious position to do so. RPUs are public, four-year, communityoriented universities. They are more numerous than nationally known state flagship and public research 1 (R1) universities, and, unlike community colleges, offer a full array of four-year degrees.

This paper assesses the economic and educational effects and overall well-being of regional public universities within the Great Lakes region, which consists of six Midwestern states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. While these states have been important sources of natural resources and centers of economic activity, over the past two decades, economic trends such as globalization and automation have hollowed out their labor markets. A healthy cadre of regional public universities could help close enrollment and attainment gaps and bolster economic growth in communities across the region.

### Distribution of regional public universities in the United States and the Great Lakes region

FY 2018



Source: Brookings analysis of IPEDS data

This report has five major findings:

# 1. The Great Lakes region has a strong concentration of regional public universities, which are important assets for fostering economic recovery.

The nation's 440 regional public universities are spread throughout 49 states, in communities of every size. The Midwest, within which Great Lakes region lies, had the country's highest concentration of RPU enrollment in 2018.

That each Great Lakes state has a significant stock of RPUs is a potentially substantial economic asset for the region, particularly its smaller communities. Universities can mitigate the impacts of economic downturns and serve as a significant source of employment growth during periods of recovery. For example, counties in these smaller communities with a public fouryear university had smaller employment losses during the Great Recession than those without a university, and saw higher aggregate employment growth during the subsequent recovery.

Likewise, counties in smaller communities with a four-year public university have a per capita income \$1,200 higher than those without a university. They also have a bachelor's degree attainment level of 25.2%, compared to an average bachelor's degree attainment level of 20.8% in counties without a university. Regional public universities also serve as significant anchor institutions and are often among the largest employers in a community.

#### Employment growth by county

Counties in small metropolitan, micropolitan, and non-metro areas, 2007 = 100



Note: Excludes counties in medium-sized metropolitan areas (defined as metropolitan areas with approximately 250,000 to 1 million people) and large metropolitan areas (defined as metropolitan areas with more than 1 million people)

Source: Brookings analysis of IPEDS and Bureau of Economic Analysis data

#### 2.Great Lakes regional public universities educate more instate and transfer students than public flagships and R1s, but enrollment is in decline.

Prior to the COVID-19 pandemic, a combination of stagnant population growth, a healthy economy, and increasing tuition had led to declining enrollment at Great Lakes regional public universities. Great Lakes RPU enrollment reached its high point in 2011, with enrollment of over 971,000 students, but has fallen by over 10% since. This decline in enrollment has had significant negative impacts on RPUs in the region, reducing tuition revenue at a time when Great Lakes states have disinvested in schools, and generating a growing financial crisis for these schools.

Great Lakes public flagships and R1s, on the other hand, have seen a 1.4% increase in enrollment since 2011. This has been driven by increased out-of-state and international student enrollment. From 2006 to 2016, the share of in-state, firsttime freshmen enrolled at Great Lakes flagships and R1s declined 9.5 percentage points, from 76.6% to 67.1%. During that same period, in-state enrollment for RPUs declined just 3.9 percentage points, from 88.2% to 84.3%.

In addition to supporting in-state students, RPUs also serve as a pathway for students who transfer into a four-year education. In 2017, transfer students accounted for 7.6% of all undergraduates at Great Lakes regional public universities, compared to 5% of undergraduates at flagship and public R1 universities in the region.

#### 3. Great Lakes regional public universities help close university attainment and completion gaps for underrepresented students.

A significant share of students from underrepresented groups enroll at regional public universities. Overall, about 62% of students attending a public four-year university in the Great Lakes region are enrolled in a regional public university. However, that share is significantly higher for certain groups. For example, 71% of Black students and nearly threequarters of Native American students that are enrolled at a public university in the Great Lakes region are enrolled at an RPU. And because such a high share of public university students attends RPUs in the region, they also account for 59% of Latino or Hispanic students attending a public four-year university, as well as 61% of students that identify as two or more races.

Regional public universities also serve as an important source of educational equity for lowincome students. Part of this is a result of cost. RPUs have lower tuition and overall costs than flagships and R1 universities. Great Lakes RPUs also enroll a higher proportion of Pell Grant students than public flagships and R1s.

RPUs award a greater share of their degrees to certain underrepresented groups-including Black students-than do public flagships and R1s. For example, RPUs award 2.4% more of their degrees to Black students than do flagships and R1s, and a slightly higher percentage of their degrees to Native American students. This is in large part because they admit a greater share of students from these underrepresented groups.

#### 4.Business, health professions, and education are the most common fields of study at Great Lakes regional public universities.

Among graduates of Great Lakes regional public universities, the three most common majors are in business, health-related professions, and education. This reflects the historical roles that many of these schools play as teaching colleges, as well as the role they currently play in filling local positions that are in critical demand, such as nursing. Among the fields with majors that are disproportionately awarded at RPUs relative to flagships and public R1s are health professions, education, and security-related fields such as law enforcement and firefighting. Here, one can see the distinct roles that regional public universities play in filling positions that are in demand in nearly every community.

#### 5. Even before COVID-19, stagnant revenue had created fiscal challenges for Great Lakes regional public universities, leaving them vulnerable to the current downturn.

Great Lakes regional public universities have faced fiscal challenges in recent years, brought on by declining appropriations and stagnant enrollment. On a per-student level, Great Lakes RPUs saw essentially no inflation-adjusted revenue growth from 2011 through 2016. It has only been since 2017 that real revenue growth has finally picked up at schools across the region, growing by over 4% per year in both 2017 and 2018. However, given anticipated hits to state budgets from the COVID-19 downturn, public higher education is likely to face unprecedented fiscal headwinds in the coming months.

This revenue stagnation has been driven by a combination of declining state appropriations and sluggish tuition growth. Per-student appropriations at Great Lakes regional public universities have declined by nearly 8% since 2006. In fact, not a single Great Lakes state saw real growth in per-student appropriations from 2006 to 2017.

While flagships and public R1s have raised their tuition to historically high levels to compensate for the decline in per-student appropriations, increases in tuition and other revenues at Great Lakes RPUs have been limited by demographic pressure, university mission, and state policy. This has left RPUs with thin financial margins and forced them to cut back on community-focused investments in areas such as research and public service.



Change over time in per-student appropriations

Note: 65 Great Lakes RPUs reported finance data every year from 2006 to 2018; 394 RPUs nationwide reported finance data every year from 2006 to 2018. Source: Brookings analysis of IPEDS data Additional financial strain will affect not only the schools themselves, but also the broader Great Lakes regional economy, particularly if RPUs are forced to further reduce support for placemaking, research, and public service. This provides a policy imperative not only to rectify the funding situation that these schools face, but also to make further, more robust investments in regional public universities.

### Implications for policy

n response to these trends and the ongoing economic turmoil, policymakers must reevaluate higher education funding structures to improve the financial situation of RPUs. They should take the following steps to do so:

### Restore essential financial support for regional public universities

- Create an emergency federal fund to protect appropriations for public universities
- Provide dedicated funding to support students with additional educational needs

#### Bolster regional public universities' placesensitive missions

- Create a new land-grant-style program for regional public universities
- Modernize the extension missions of landgrant universities
- Rapidly scale up federal and state research funding to regional public universities
- Develop university-based anchor strategies to foster growth and redevelopment

### Encourage greater enrollment by nontraditional students

- Provide a new federal funding stream to help universities recruit adults to reenroll
- Make high-demand fields and fields of critical community need more accessible to working professionals
- Support liberal arts fields and link them more clearly to the labor market
- Incorporate a "career exploration" approach
- Support direct collaboration between industry and universities
- Fund paid experiential learning programs to help students get labor market experience

### Improve data quality for regional public universities and students

 Create a federally backed student unit record system or, in the absence of federal action, create an interstate Great Lakes student unit record system



### Introduction

The past decade has laid bare the uneven nature of the modern U.S. economy. Even before the COVID-19 pandemic forced the country into a tailspin, many places had yet to fully recover from the last recession. While socalled "superstar" cities such as San Francisco and Boston dominated national job growth, over a quarter of U.S. metro areas still had fewer jobs than they did in 2007. While the effects of the pandemic-induced downturn have been ubiquitous, those struggling places are again being disrupted, with even fewer economic resources to aid them.

As these economic changes unfold, long-standing inequalities in the U.S. higher education system have continued. Today, a person in the highest income quartile is nearly five times more likely to have a degree by age 24 than someone in the lowest.<sup>1</sup> Meanwhile, Black, Latino or Hispanic, and Native American students are all still underrepresented among bachelor's degree recipients relative to their share of the U.S. population.<sup>2</sup>

Regional public universities (RPUs)-which educate thousands of students from underrepresented groups every year and serve as economic anchors for hundreds of communities around the U.S.-are essential to changing these trends and bolstering economic recovery. RPUs are public, four-year, communityoriented universities. They are more numerous than nationally known state flagship and public research 1 (R1) universities, and, unlike community colleges, offer a full array of four-year degrees. They often conduct vital, regionally focused research and enhance the human capital capacity of the places in which they are situated.

But despite higher economic stakes and persistent educational challenges, state budgetswhich are the primary source of public higher education funding-are likely to be significantly damaged by the current economic collapse. And just as many metro areas had not recovered to their pre-Great Recession employment levels, most states have not restored higher education funding to pre-Great Recession levels. In 2018, real, inflation-adjusted state higher education appropriations per student were 20% below their 2001 level nationwide, coming out to nearly \$2,000 less per student.<sup>3</sup> And while higher education appropriations had modestly increased in recent years, funding levels had still only recovered half of what they lost since the start of the Great Recession, remaining 11% below 2008 levels, even as state budgets fully recovered.<sup>4</sup>

The Great Lakes region, historically a core of U.S. manufacturing, has been particularly affected by these trends. The region, as defined in this report, consists of six Midwestern states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. While these states have been important sources of natural resources and centers of economic activity, over the past two decades, economic trends such as globalization and automation have hollowed out their labor markets. Not only will the current crisis likely worsen these trends, the Great Lakes region is also on the leading edge of a demographic shift in higher education that could affect the entire country in coming years.

Estimates show that by the early 2030s, there could be approximately 12% fewer high school graduates in the Great Lakes region than there were in 2010.<sup>5</sup> This decline in high school graduates means that colleges and universities won't be able to rely on a steady flow of collegeaged students to generate revenue growth. It also means that any new growth in university enrollments in the wake of the downturn may not be enough to offset state disinvestments over the past two decades. At the same time, sluggish population growth will have significant workforce implications, as regional labor forces stagnate and local growth in one community comes only at the expense of another. Together, these trends put often-overlooked regional public universities in the crosshairs, both as unique sites of opportunity to address these challenges as well as institutions in an increasingly precarious position to do so. A healthy cadre of regional public universities could help close enrollment and attainment gaps and bolster economic growth in communities across the region. But state and federal disinvestment has put many of these universities into dire financial circumstances, at times forcing them to choose between engaging with their communities or supporting their students.

However, if there is a silver lining to this crisis, it is that it has fostered a brief moment of potential bipartisan policymaking, with bold policy ideas being proposed to support economic institutions. To that end, policymakers can and should leverage this moment–including through the next round of COVID-19 stimulus or recovery funding– to better support regional public universities.

This report aims to answer: (1) what regional public universities are, (2) why they matter, (3) how they are doing in the Great Lakes region, and (4) what policymakers can do to improve their collective potential. It summarizes relevant literature, analyzes new quantitative data on regional public universities' condition, and uses qualitative interviews to contextualize their unique assets and challenges. Above all, the report finds that these institutions matter both for people and for places. To that end, it's time for policymakers on the state and federal level to shift RPUs into focus to improve outcomes for students and promote recovery in the communities that they serve.



## What are regional public universities and why do they matter?

Regional public universities are a diverse class of four-year, higher education institutions with varied histories. Some RPUs began as "normal schools" for teacher training and grew to become universities with significant course offerings. Others were created as branch campuses of existing universities, or originated as community colleges and grew to become four-year universities.<sup>6</sup> Today, some are research universities while others are primarily teaching colleges. But regardless of history, they all share a commitment to promoting educational access and the unique needs of their region.

As a result of this diversity, RPUs are also a class of schools that can be difficult to define. Nonetheless, multiple scholars and organizations working closely with this class have attempted to do so. One line of research focuses on schools known as "regional comprehensive universities," a term that, while not a perfect synonym, is sometimes used interchangeably with "regional public universities." Regional comprehensive universities are public, four-year, bachelor's degree-offering schools that are not primarily research-focused and offer a "comprehensive" set of degree offerings (in other words, they don't have a specialized focus in a single field or single set of related fields).

University of Oklahoma Associate Professor Alisa Hicklin Fryar has provided significant definitional work on regional comprehensive universities.<sup>7</sup> She leverages two distinct methods to inventory these schools, each of which yields a different count (but with significant overlap). The first uses a "historical" definition based on a school's historic identity as a nonresearch or nonflagship university.<sup>8</sup> This method yields a tally of 473 universities. The second uses what Fryar calls a "contemporary" definition, leveraging the Carnegie classification to distinguish between public research and nonresearch universities.<sup>9</sup> This process yields a tally of 384 schools.

Other scholars studying regional comprehensive universities have come up with counts in the same range. For example, Cecilia Orphan, an assistant professor of higher education at the University of Denver, puts the count of regional comprehensive universities at between 420 and 430.<sup>10</sup>

Some publications have cast a wider net. A recent report on regional public universities by the education-focused publication Inside Higher Ed described this class of schools as "a broad group of institutions that have historically received significant funding from state tax dollars and are under some level of public control," that "have traditionally been oriented more toward teaching than research," and that "tend to draw students mostly from their backyard or adjacent areas." They developed a list of over 500 institutions in this classification."

This paper uses an expanded version of Fryar's "contemporary" method in thinking about RPUs. It leverages the Carnegie classification method mentioned above, but broadens it to include some smaller research universities, as they play an important role in regional and community development and face some of the same financial constraints as their nonresearch counterparts.

All the schools assessed here are four-year public colleges or universities. While private universities can have many of the same economic impacts as public universities, RPUs often have a dual focus: not only educating the state's population, but committing to the prosperity of the places in which they are situated.<sup>12</sup> Furthermore, policymakers have significantly more tools available to enhance these schools' well-being (or, conversely, to harm their performance), hold them accountable to meeting state goals, and ensure they fulfill state public interests. Historically, public universities have also been more affordable for students than state flagship campuses or private colleges, meaning they play an important role in making higher education access more equitable.

From there, this paper excludes what the Carnegie classification calls public "research 1" (R1) universities, which are the 94 public universities (across 42 states) that conduct the highest levels of research activity. Likewise, this paper also excludes state flagship universities. While there is no official definition for a "flagship" university, they are generally seen as the most prominent or well-known university in the state.<sup>13</sup> Flagship and public R1 universities are typically among the largest in the state, with major research operations, hospitals, alumni donors, and brand recognition. This allows them to enroll far larger proportions of out-of-state students than RPUs and gives them access to significant revenue sources that aren't dependent on state appropriations. Despite that, states often still provide higher levels of funding to flagships than they do to other schools. As a result, public flagship and R1 universities are in a substantially different financial position than regional public universities.

There are several additional classes of universities that are distinct from regional public universities. Two are federal service academies and state military and maritime academies, such as the United States Military Academy at West Point, the Citadel in South Carolina, or the Massachusetts Maritime Academy. Due to the significant level of federal funding these schools receive, and their focus on training commissioned officers for the armed forces, their financial situation and community roles are distinct from RPUs.

Another group that is not included here are colleges and universities that focus exclusively on online or distance education. Often called "global campuses" or "world campuses," these schools are often online "branches" of flagship schools, and don't have the same place-based presence as a regional public university. Likewise, two-year upper-level colleges (which only serve juniors and seniors) are not included here, as they are not four-year schools. While these colleges share some characteristics with RPUs, their history, mission, and operating models make them distinct from their four-year counterparts.

Finally, this paper does not address community colleges, which have several important differences from regional public universities. For example, while community colleges can serve as anchor institutions for communities, their campuses are often smaller than fouryear universities, with fewer facilities such as dormitories or lab space. Likewise, they conduct minimal research, and primarily teach firstand second-year students. Moreover, because community colleges offer mostly two-year degrees (though in about half of states they offer some bachelor's degrees), their incentive structures are different than RPUs. For example, many students enter community colleges with the intention of transferring to a four-year college, or as a nondegree student seeking a certificate or other credential. To that end, community colleges are significantly integrated into the U.S.

workforce development system in a way that four-year public colleges are not. Finally, despite the many (significant) challenges they face, community colleges seem to be in vogue among researchers and policymakers. It's noteworthy that even as divisive debates over "free college" continue to swirl, nearly every 2020 Democratic presidential candidate has endorsed free community college financed largely by the federal government.<sup>14</sup>

This methodology leaves us with a list of 440 four-year public universities distributed across 394 counties in 49 states (every state except Wyoming and Washington, D.C.). Of those schools, 439 existed during the 2017 to 2018 academic year and had IPEDS data available.<sup>15</sup> In 2018, those 439 schools enrolled over 5 million students at the undergraduate and graduate levels, compared to some 3.6 million students enrolled in flagship and public R1 universities nationwide. Across those 49 states, RPUs have a presence in every type of community: 55% are in medium or large metro areas, while 45% are in small metro areas, micropolitan areas, or nonmetro areas.

#### MAP1

### Distribution of regional public universities in the United States and the Great Lakes region

FY 2018



Source: Brookings analysis of IPEDS data

#### How universities support community and economic development

The COVID-19 downturn has created new urgency on jump-starting growth and supporting economic recovery in places across the country. As community anchor institutions and sources of human capital development, regional public universities are well-positioned to support this redevelopment effort.

While there is limited quantitative analysis assessing the impact that RPUs have on communities and regions, this section will briefly review some of the quantitative literature around the impact of universities in general, as well as qualitative research on the effects of regional public universities.

Many universities and policymakers sponsor economic impact studies to quantify the effect of universities on state economies. These numbers demonstrate that universities can have significant employment and spending effects. For example, a 2013 impact analysis of the University of Michigan system found that public universities in the state supported some 121,000 jobs-nearly the size of the state's automotive industry, which supported approximately 150,000 jobs.<sup>16</sup>

However, universities are distinct from other types of major infrastructure investments, as their impacts extend beyond just their hiring and spending in communities. Scholars Harvey Goldstein, Gunther Maier, and Michael Luger identify eight services-or "products"-that research universities create: knowledge creation, human capital creation, transfer of know-how, technological innovation, capital investment, regional leadership, knowledge infrastructure production, and influence on regional milieu.<sup>17</sup>

Most quantitative studies on universities' economic impact focus on the effects of technology transfer and commercialization, or the patenting and commercial use of university research findings.<sup>18</sup> But even without extensive technology transfer operations, universities

still generate locally relevant research, help produce a skilled regional labor force, and fill jobs in demand in the local labor market. A 2006 study by Harvey Goldstein and Joshua Drucker found that the human capital creation function of universities-particularly at the graduate level in science and technology fields-raised average earnings in smaller metropolitan areas. However, they also found that too many degrees can glut a local labor market and detract from earnings, and therefore recommended tailoring teaching functions to match the skill demands of a local labor market.<sup>19</sup> A follow-on study in 2016 by Drucker found higher education's influence on regional development to be less strong than previous analyses showed, but also showed that universities' traditional research and teaching activities were more effective contributors to regional development than technology commercialization.<sup>20</sup>

Evidence also suggests that universities can help substitute for local agglomeration economies in smaller communities. Multiple empirical studies have shown that smaller metropolitan areas demonstrate greater gains from university activities than their larger counterparts.<sup>21</sup> Likewise, qualitative evidence shows that RPUs can promote small business incubation.<sup>22</sup> This is particularly important in the wake of a downturn, when small businesses have been hit hard and new job creation will rely on the emergence of new, innovative firms.

Finally, even schools with smaller (or no) research operations still contribute to regions' well-being. While there is inadequate quantitative analysis on the effects of four-year, nonresearch universities on communities, some research has assessed the economic impact of community colleges, which have similar teaching-focused missions. Andrew Crookston and Gregory Hooks assessed the impacts of community colleges on employment growth in rural communities and found that in earlier decades–when state appropriations were more abundant–community college presence was positively linked to employment growth. However, in more recent years when state appropriations declined, employment was negatively impacted in communities where colleges could not make up the loss through tuition, grants, or contracts.<sup>23</sup> This suggests that nonresearch colleges can have positive impacts for communities when adequately supported, but also that state disinvest can harm local economic well-being. This is important for policymakers to note as they work to jump-start job growth in both metropolitan areas and smaller communities.

These findings are backed up by qualitative research showing that RPUs play a variety of important roles in their communities. Scholars Cecilia Orphan and Kevin McClure, who specialize in studying regional comprehensive universities, find that they grow, invest, and leverage a variety of different forms of capital in their communities, including:

- Cultural capital: developing and maintaining cultural customs (e.g., through museums and cultural events)
- Political capital: enhancing access to power brokers (e.g., by advocating to political leaders on behalf of the region)
- Financial capital: providing financial resources for the community (e.g., through purchasing

goods and serving as significant employers in a region-often the largest)

- Social capital: enhancing connections between people and organizations (e.g., through student service to nonprofits)
- Built capital: supporting regional infrastructure (e.g., through libraries, student centers, and event spaces)
- Human capital: developing the skills, education, health, and self-esteem of community members (e.g., through education, workforce development, or public health efforts)<sup>24</sup>

Regional public universities also help reduce inequities in education. In particular, RPUs provide access to a variety of groups who are underserved by flagship and R1 universities, including nontraditional age students, working students, and students requiring co-requisite or supplemental remediation as well as nonacademic skill development.<sup>25</sup> Immigrant students and students with children are also commonly served by regionals.<sup>26</sup> Likewise, 43% of regional public universities have an openaccess mission, meaning they provide educational opportunities to any student who applies.<sup>27</sup>



These factors mean that regional public universities are adept at promoting upward mobility for low-income students. A research team led by Harvard economist Raj Chetty found that rates of bottom-to-top quintile intergenerational mobility are highest at certain mid-tier public universities.<sup>28</sup> These findings have been elaborated on by Jorge Klor de Alva at the American Enterprise Institute, who found that upward mobility at RPUs is closely linked with college completion and field of study.<sup>29</sup>

Regional public universities can likewise provide opportunities for undergraduates that may not exist at large flagships or public R1s. For example, RPU leaders note that their research tends to engage undergraduates at a more significant level than R1 universities, which can serve as a experiential learning opportunity for undergraduates.<sup>30</sup> This is due in part to their student-centered mission, with faculty evaluated not just on the quality or impact of their research, but also on how well they teach and mentor students.<sup>31</sup>

These factors make regional public universities essential assets for students who don't want to attend a large state flagship or R1 as well as for place-bound students who don't have the ability to move. This has important effects for communities, as it helps improve the local stock of human capital. This, in turn, can encourage greater economic investment and attract major employers to a region. This sort of local economic development could become more important than ever as the country recovers from historically unprecedented employment disruption as a result of COVID-19. In many cases, RPUs also work to align degrees with regional economic needs.<sup>32</sup> And, as with their human capital efforts, research at RPUs is often locally and regionally focused.<sup>33</sup> Furthermore, RPUs frequently educate individuals who fill critical community roles such as (but not limited to) teachers, local health care professionals, and local government officials. A highly skilled stock of these professionals is critical in crises such as a pandemic and can be the difference between an adequate community response and an exacerbated downturn.

However, while regional public universities provide important benefits for both students and communities, they are in an increasingly precarious position to do so. In their book, Unequal Higher Education: Wealth, Status, and Student Opportunity, scholars Barrett J. Taylor and Brendan Cantwell note that the gap in financial health between smaller, nonselective public colleges 15 years ago and today is perhaps the most consequential inequality in American higher education.<sup>34</sup> The authors note that, when funded sufficiently, nonselective public colleges yield better student outcomes and provide a significant return on investment for students. However, when states disinvest in schools, turning them into "vulnerable" institutions, it results in a poor return on investment for students.<sup>35</sup>

In 2005, the year Taylor and Cantwell started their analysis, virtually no public colleges or universities were classified as vulnerable. But by 2013, 12% of all public colleges and universities had become vulnerable.<sup>36</sup> The authors note that these schools enroll Black and Native American students, as well as lower-income students, at higher rates, and that the impacts of this financial stress fall disproportionately on those students.<sup>37</sup> Unfortunately, in the wake of the COVID-19 crisis, it's likely that many more regional public universities will join the "vulnerable" category.

COVID-19, for its part, forced a variety of disruptive changes onto regional public universities (and indeed the entire higher education system) that may have lasting impacts. It's not yet clear what direction these changes will take. For example, the sudden need to social distance and move to online learning provided significant challenges for students at RPUs, who tend to have more limited internet access and therefore need greater levels of support for remote learning. Regional public universities have needed to provide above-and-beyond student support, whether that is providing free or subsidized laptops and Wi-Fi hotspots to students or establishing designated, social distanced computers on campus for students to stream classes.

Furthermore, the move to distance learning could have unforeseen effects on how universities teach students and engage with communities. On one hand, if this shift encourages schools to move a greater share of their class catalogues online, it could loosen the tether between schools and regions as schools look to broaden their reach to online students across the country. Conversely, the hasty move to online learning could expose a myriad of obstacles and inefficiencies that instead spark a backlash. This could strengthen the in-person, on-campus teaching model, leading to deeper connections between schools and places. How this process plays out could have substantial impacts on students, communities, and universities in the coming years.

A deliberate effort by policymakers to support regional public universities, then, could enhance the well-being of students that attend them and drive recovery in the communities in which they are situated. However, these schools haven't received the level of policy support and attention that flagship or major R1 universities have received. What follows is a survey of the major trends now manifesting themselves around regional public universities in the Great Lakes region.





### Findings

This paper assesses the economic and educational effects and overall well-being of regional public universities within the Great Lakes region, which consists of six Midwestern states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Even before the COVID-19 pandemic, the Great Lakes region faced economic and demographic headwinds that could affect more of the country in future years. However, during the last downturn, regional public universities were able to mitigate some of the worst impacts for communities, fill critical community roles, and expand educational access. A look at how this region supports and is served by these schools can therefore provide insight into some of the challenges and opportunities that RPUs and communities nationwide could face in the near future.

#### 1. The Great Lakes region has a strong concentration of regional public universities, which are important assets for fostering economic recovery.

The nation's 440 regional public universities are spread throughout 49 states, in communities of every size. The Midwest, within which Great Lakes region lies, had the country's highest concentration of RPU enrollment in 2018. Great Lakes RPUs enrolled 1,683 students for every 100,000 residents, while the Midwest overall enrolled 1,741 students for every 100,000 residents. No other region enrolled more than 1,518 students for every 100,000 residents.

Within the Great Lakes region, Indiana led with the highest RPU enrollment per capita in 2018, while Illinois–with its significant population center in Chicago–had the lowest per capita enrollment.

Great Lakes RPUS are distributed across nearly every community type in the region, with 51.5% in midsized or large metropolitan areas and 47.1% in small metro areas or micropolitan areas. Only one RPU-the University of Minnesota Morris-is in a nonmetropolitan area.

That each Great Lakes state has a significant stock of RPUs is a potentially substantial economic asset for the region, particularly its smaller communities. Universities can mitigate the impacts of economic downturns and serve as a significant source of employment growth during periods of recovery. Looking at trends from the Great Recession and the subsequent recovery can help demonstrate how regional public universities support communities.

For example, smaller communities (small metropolitan areas, micropolitan areas, and nonmetropolitan counties) fared worse than midsized and large metro areas in the aftermath of the Great Recession.<sup>38</sup> However, counties in these smaller communities with a public four-year university had smaller employment losses during the Great Recession than those without a university, and saw higher aggregate employment growth during the subsequent recovery.<sup>39</sup> Counties in small communities with a regional public university specifically saw their

#### TABLE 1

Region	RPUs	RPU enrollment	Population	Schools per 100,000 residents	Enrollment per 100,000 residents
Midwest	100	1,187,831	68,236,628	0.15	1,740.80
Great Lakes	68	883,481	52,492,636	0.13	1,683.10
Northeast	102	850,866	56,046,620	0.18	1,518.10
South	167	1,882,685	124,569,433	0.13	1,511.40
West	70	1,164,293	77,834,820	0.09	1,495.90

#### Regional public university enrollment by region

Note: Data reflects the 439 regional public universities that existed during the 2017-2018 academic year Source: Brookings analysis of IPEDS and Census Bureau data

#### TABLE 2

State	RPUs	RPU enrollment	Population	Schools per 100,000 residents	Enrollment per 100,000 residents
Indiana	11	145,349	6,634,304	0.17	2,191
Michigan	12	192,915	9,950,571	0.12	1,939
Ohio	14	221,127	11,634,370	0.12	1,901
Wisconsin	11	106,800	5,772,628	0.19	1,850
Minnesota	10	94,551	5,522,744	0.18	1,712
Illinois	10	122,739	12,820,527	0.08	957

#### Regional public university enrollment among Great Lakes states

Note: Data reflects the 68 Great Lakes regional public universities that existed during the 2017-2018 academic year

Source: Brookings analysis of IPEDS and Census Bureau data

employment levels decline by 0.8% less than counties without a university from 2008 to 2010, and saw their employment levels grow by 0.5% more from 2010 to 2018.

Similarly, counties in smaller communities with a four-year public university have higher levels of per capita income than those without a university. Counties in small communities with an RPU had a per capita income over \$1,200 higher than those with no university in 2017. This is likely a combination of the universities producing a more educated local workforce that can command higher wages, as well as the university itself serving as a source of good jobs.

However, counties in smaller communities without a university have seen faster income growth than counties with a four-year public university since 2009 (the year real income reached its lowest point due to the Great Recession).<sup>40</sup> As a result, the gap has closed somewhat over the past decade. This could be a cause for concern, particularly if income growth in communities with an RPU slows further in the wake of the COVID-19 downturn.

These trends generally hold when you include larger metropolitan areas as well-and, in fact, are sometimes compounded, because counties in larger metro areas may contain multiple public universities, as well as other significant anchor institutions.

Likewise, counties with an RPU have higher levels of bachelor's degree attainment than communities with no university. Not only do universities produce bachelor's degree recipients, but they also attract individuals with a bachelor's degree (or higher) in the form of staff and faculty. Bachelor's degree attainment is important not only because it leads to higher earnings, but also because evidence shows that workers with a bachelor's degree are more resilient to some forms of automation, and better equipped to handle job transitions.<sup>41</sup> On average, a county in a smaller community with a regional public university has a bachelor's degree attainment of



Note: Excludes counties in medium-sized metropolitan areas (defined as metropolitan areas with approximately 250,000 to 1 million people) and large metropolitan areas (defined as metropolitan areas with more than 1 million people)

Source: Brookings analysis of IPEDS and Bureau of Economic Analysis data

#### FIGURE 2

#### Per capita income

Counties in small metropolitan, micropolitan, and non-metro areas, 2017



Note: Excludes counties in medium-sized metropolitan areas (defined as metropolitan areas with approximately 250,000 to 1 million people) and large metropolitan areas (defined as metropolitan areas with more than 1 million people)

Source: Brookings analysis of IPEDS and Bureau of Economic Analysis data

25.2%, while a county in a smaller community with no university has an average bachelor's degree attainment of 20.8%.42

Finally, multiple studies have explored the role that regional public universities, and universities more broadly, play as anchor institutions. RPUs are typically among the largest (if not the largest) employers in smaller communities.<sup>43</sup> In micropolitan areas with a regional public university, RPUs account for 3.1% of direct employment. Among nonmetropolitan counties with a regional public university, that share climbs to 4.8%.<sup>44</sup> Universities also generate significant indirect and induced employment as well. This anchor institution role, and the employment and economic activity floor that it provides, is a major reason why regional public universities can help drive economic recovery for communities.

#### 2. Great Lakes regional public universities educate more in-state and transfer students than public

#### flagships and R1s, but enrollment is in decline.

Prior to the COVID-19 pandemic, a combination of stagnant population growth, a healthy economy, and increasing tuition had led to declining enrollment at Great Lakes regional public universities. Between 2007 and 2018, Great Lakes RPUs saw a 5.2% enrollment decline, falling from over 916,000 enrolled students in 2007 to just over 869,000 in 2018.

Great Lakes RPU enrollment reached its high point in 2011, with enrollment of over 971,000 students, and has fallen by over 10% since. This decline in enrollment has had significant negative impacts on RPUs in the region, reducing tuition revenue at a time when Great Lakes states have disinvested in schools. This has perpetuated a growing financial crisis for these schools, which is profiled in more detail later in the report.

Great Lakes public flagships and R1s, on the other hand, have seen a 6.4% enrollment increase since 2007, and a 1.4% increase in enrollment

#### FIGURE 3



Change over time in total 12-month enrollment FY 2007 = 100

Note: 67 Great Lakes RPUs reported enrollment data every year from 2007 to 2018; all 12 Great Lakes public flagships and R1s did so for every year. Source: Brookings analysis of IPEDS data

since 2011. This has been driven by increased outof-state and international student enrollment.

These trends hold on the undergraduate level as well. Since 2007, undergraduate enrollment at Great Lakes public flagships and R1s has increased by 7.3%, while it has declined by 2.2% at RPUs in the region. Since 2011, undergraduate enrollment at Great Lakes public flagships and R1s has increased by 2.2%, while declining by 9.8% at Great Lakes RPUs.

It's possible that a prolonged recession could provide a boost to enrollment at regional public universities. College enrollment tends to be countercyclical-that is, as the economy worsens and fewer jobs are available, the opportunity cost of returning to school lowers. This, in turn, leads to an increase in enrollments.

However, other sectors of higher education potentially could capture a greater share of returning students. For example, after the Great Recession, public four-year universities-which includes RPUs, but also flagships, R1s, and other public four-year schools-captured around 27% of new enrollment growth. But public four-year universities were outpaced by both community colleges (which captured 32% of the enrollment increase) and for-profit institutions (which captured nearly 30%).<sup>45</sup> This may be because community colleges and for-profit schools capture a higher share of students interested in technical training, which is popular among older and displaced workers. For-profit schools also frequently rely on online courses and rented facilities, which may allow them to scale up capacity guicker.46

Finally, evidence suggests that students were more likely to enroll in for-profit colleges when states cut funding to public colleges.<sup>47</sup> When such cuts force tuition increases, it makes forprofit colleges more cost-competitive. This is problematic because some for-profit institutions use predatory tactics to boost enrollment and revenue, and the sector as a whole produces both significantly lower graduation rates than public colleges and significantly higher rates of student loan defaults.<sup>48</sup> In addition to losing potential new enrollments to community colleges and for-profit institutions, Great Lakes regional public universities would need to contend with demographic headwinds. The Great Recession coincided with larger cohorts of high school graduates as the millennial generation graduated. Because high school graduations in the region are smaller today, any enrollment boost may not be enough to overcome losses from demographic change.

Finally, the lingering effects of social distancing may still be felt on campuses over the next year. It's possible that the pandemic will not be resolved by the start of the next school year, or that COVID-19 or a similar disease could have a resurgence in the fall. In that case, students may prefer to enroll at schools offering more online classes, which could advantage both for-profit institutions and flagships and R1s with a robust online presence. Given these variables, it's too early to say what effects the COVID-19 downturn will have on college enrollment in the coming years.

Over the past decade, Great Lakes flagships and R1s have shifted their enrollment away from in-state students at twice the rate of regional public universities. While IPEDS has limited data for tracking in-state or out-of-state status, it does track enrollment of first-time freshmen by this metric, providing the closest (albeit a far from perfect) proxy for measuring student migration. From 2006 to 2016, the share of in-state, firsttime freshmen enrolled at Great Lakes flagships and R1s declined 9.5 percentage points, from 76.6% to 67.1%. During that same period, in-state enrollment for RPUs declined just 3.9 percentage points, from 88.2% to 84.3%.

In 2016, Great Lakes RPUs enrolled nearly twice as many in-state, first-time freshmen as public flagships and R1s in the region.<sup>49</sup> Enrolling more in-state students, both in absolute terms and as a share of student body, means that RPUs serve as an important source of human capital development for states.



#### In-state first-time freshmen as a share of enrollment

Great Lakes public universities

Note: 66 Great Lakes RPUs reported in-state/out-of-state first-time, full time freshmen enrollment data in both 2006 and 2016; all 12 Great Lakes flagship and R1 universities reported in-state/out-of-state enrollment data in both years.

Source: Brookings analysis of IPEDS data

But enrolling a greater share of in-state students also serves as a financial constraint on RPUs, as in-state students pay lower tuition rates than out-of-state and international students. In many states, policymakers have required regional public universities to enroll a large percentage of in-state students through policies such as enrollment targets, even as they reduce financial support for public higher education. So even as RPUs help educate more local students than their flagship and R1 counterparts, they fall further behind when it comes to revenue.

In addition to supporting in-state students, RPUs also serve as a pathway for students who transfer into a four-year education. In 2017, transfer students accounted for 7.6% of all undergraduates at Great Lakes regional public universities, compared to 5% of undergraduates at flagship and R1 universities in the region.<sup>50</sup> Furthermore, the majority of community college students who transfer to four-year institutions transfer to regional colleges.<sup>51</sup> And once a student transfers from a community college to an RPU, they tend to have success. One study showed that community college students who transferred to less selective public four-year institutions had a greater chance of graduating than students who enrolled in four-year institutions as freshmen.<sup>52</sup> In this regard, the topline difference in transfer rates actually undersells how important RPUs are for nontraditional students.

However, RPUs in the Great Lakes region have a declining transfer-in rate, dropping from 7.9% in 2007 to 7.6% in 2017. Attracting more transferins could serve as a valuable source of enrollment growth and student graduation success at a time when the overall population of high school graduates, and regional enrollment at RPUs, have started to decline.

#### 3. Great Lakes regional public universities help close university attainment and completion gaps for underrepresented students.

Literature shows that regional public universities are an important source of educational access for certain underserved groups, and that is borne out in demographic analyses of RPUs.

Regional public universities help close racial attendance gaps. Compared to the Great Lakes region's population as a whole, RPUs (as well as public flagship and R1s) enroll a greater share of Latino or Hispanic students, as well as students reporting two or more races. Compared to flagship and R1 universities, RPUs enroll more Black students as a share of their student population, as well as a higher share of Native American students.

As a result, a significant share of students from underrepresented groups enroll at regional public universities. Overall, about 62% of students attending a public four-year university in the Great Lakes region are enrolled in a

#### FIGURE 5





Note: Numbers do not add to 100% due to rounding

Source: Brookings analysis of IPEDS and Census Integrated Public Use Microdata Series (IPUMS) data

regional public university. However, that share is significantly higher for certain groups. For example, 71% of Black students, and nearly three quarters of Native American students, that are enrolled at a public university in the Great Lakes region are enrolled at an RPU. And because such a high share of public university students attends RPUs in the region, RPUs also enroll 59% of Latino or Hispanic students attending a public four-year university, as well as 61% of students that identify as two or more races.

However, regional public universities still have more to do to close enrollment gaps in the region. For example, Great Lakes RPUs enroll a lower share of Black students than the region's share of Black residents overall. Regional public universities should continue working to ensure the demographics of their schools fully reflect the demographics of the region.

Regional public universities also serve as an important source of educational equity for lowincome students. Part of this is a result of cost. RPUs have lower tuition and overall costs than flagships and R1 universities. Great Lakes RPUs also enroll a higher proportion of Pell Grant students than public flagships and R1s.

One of the most contentious points around regional public universities is that they have significantly lower graduation rates than their flagship and R1 counterparts. Students at RPUs within the Great Lakes region graduate at a rate 25 percentage points lower than students at flagship and R1 schools.

While continuing to improve performance across the higher education spectrum is an important endeavor, the topline graduation rate as reported in IPEDS has several shortcomings that make it an unreliable indicator of performance at RPUs. For example, the topline university graduation rate is based on students who enroll as "firsttime, full time students."<sup>53</sup> This means it excludes many students, such as part-time students or students who stop attending college at some point but then later reenroll.<sup>54</sup> As a result, a



#### FIGURE 6



Note: 67 Great Lakes RPUs reported Pell Grant data every year from 2008 to 2018; all 12 Great Lakes public flagships and R1s did so for every year.

Source: Brookings analysis of IPEDS data

#### Six year graduation rate

Great Lakes public universities, FY 2018



Source: Brookings analysis of IPEDS data

significant number of students at RPUs are excluded from graduation measures–estimates show around 40% of students do not meet the "first-time, full-time" criteria.<sup>55</sup> And in some schools, the number of students excluded from graduation rate data exceeds the number included in it.<sup>56</sup> In short, the most commonly used metric for student graduations excludes nearly half of the students at many regional public universities.

And while flagships and public R1s have higher graduation rates, this is also a function of their selectivity. Many regional public universities are open-access, and even those that aren't typically have higher admissions rates that flagships and public R1s. This gives flagships and public R1s the ability to select more qualified students, who are more likely to graduate with fewer interventions. In this regard, graduation rates say more about the inputs (i.e., the share of students already likely to succeed) than about the output (the quality of education received). In short, there are multiple factors that explain the difference in topline graduation rates between RPUs and their flagship and public R1 counterparts. Because the graduation rate data on IPEDS suffer from these shortcomings, counting the number of degrees awarded by race can help fill in the picture of how different groups are served by regional public universities. Degree data show that in addition to closing racial attendance gaps, RPUs are an important resource for closing racial attainment gaps.

RPUs award a greater share of their degrees to certain underrepresented groups-including Black students-than do public flagships and R1s. For example, RPUs award 2.4% more of their degrees to Black students than do flagships and R1s, and a slightly higher percentage of their degrees to Native American students. This is in large part because they admit a greater share of students from these underrepresented groups.

However, Great Lakes RPUs lag behind public flagships and R1s in the region when it comes to the share of degrees awarded to Latino or Hispanic students and students that identify as two or more races. This, too, is due to these schools admitting a lower share of Latino or Hispanic students than flagships and public R1s.



#### Share of bachelor's degrees awarded by race

Great Lakes states

Note: IPEDS bachelor's degree data for FY 2018, state demographic data from 2017. Numbers do not add to 100% due to rounding.

Source: Brookings analysis of IPEDS and IPUMS data

Furthermore, degrees awarded by Great Lakes RPUs to Black, Latino or Hispanic, and Native American students still lag behind those groups' share of the region's population.

But while the share of RPU degrees going to underrepresented minority groups lag behind those groups' share of the overall population, in absolute terms, RPUs still award more degrees to those groups than flagships and public R1s. Because RPUs enroll more students than flagships and R1s, there are 1.6 times as many degrees awarded at Great Lakes regional public universities than at flagship or public R1 universities in the region. However, several underrepresented groups disproportionately benefit from RPUs.

Great Lakes regional public universities award 2.37 times as many degrees to Black students as flagships and public R1s do. Native American and Native Hawaiian students also receive a disproportionate share of degrees from RPUs.

All of this suggests that regional public universities will be critical to supporting underrepresented groups and enhancing communities' human capital capacity throughout



Number of RPU bachelor's degrees awarded for every flagship/R1 degree, by race Great Lakes states, FY 2018

the COVID-19 downturn and its aftermath. This crisis, if properly managed by policymakers, could provide an opportunity for universities and states to affirm their commitment to supporting the "new majority" of students, consisting of students of color, returning adult students, and other previously underrepresented groups. Doing so would be one of the best ways to increase both individuals' and communities' resilience in anticipation of the next crisis.

#### 4. Business, health professions, and education are the most common fields of study at Great Lakes regional public universities.

Among graduates of Great Lakes regional public universities, the three most common majors are in business, health-related professions, and education. This reflects the historical roles that many of these schools play as teaching colleges, as well as the role they currently play in filling local positions that are in critical demand, such as nursing.

Source: Brookings analysis of IPEDS data



#### Most common majors at Great Lakes RPUs

FY 2017

Note: Includes both associate's degrees and bachelor's degrees. Source: Brookings analysis of IPEDS data

This becomes clearer when comparing the distinction in majors between regional public universities and flagships and R1s. Among the fields with majors that are disproportionately awarded at RPUs are health professions, education, and security-related fields such as law enforcement and firefighting. Here, one can see the distinct roles that regional public universities play in filling positions that are in demand in nearly every community. These roles become even more poignant when regions and states experience disruptions, whether it's a public health emergency like COVID-19 or a slowerunfolding crisis like the teacher shortages many states across the country face. RPUs also award more degrees in liberal arts and general studies majors, of which 75% were bachelor's degrees and 25% were associate degrees. This seems to reflect both a greater demand for liberal arts education compared to students at flagships and R1s, as well as students who receive an associate degree with the aim of pursuing a bachelor's degree in another field.



### Majors with largest differences between RPUs and public flagships/R1s FY 2017

Note: Includes both associate's degrees and bachelor's degrees. Source: Brookings analysis of IPEDS data

In general, RPUs award fewer degrees in computer sciences, agriculture, biology, social sciences, and engineering. Agriculture is to be expected, as land-grant schools have significant specializations in agriculture sciences. Computer science, biology, and engineering, for their part, all typically require not only specialized facilities, but also students with strong STEM backgrounds. Regional public universities, which have limited financial capacity and a higher percentage of students who have been underprepared, are therefore less likely to have robust graduation rates in these fields. However, this trend is not universal, and there are some RPUs that have robust graduation rates in STEM fields.

These patterns are consistent when compared across schools as well. For example, either business or health professions are the most common field of study at 318, or 72%, of regional public universities nationwide. Business fields are either the largest or second-largest field of study at over 76% of RPUs across the country, and health fields are either the largest or second-largest field of study at 41% of RPUs nationwide.<sup>57</sup> Across all universities (public and private) in the U.S., business is the most popular major field, while health fields are the fifth most common.<sup>58</sup>

Importantly, different fields of study can lead to significantly different wage outcomes for graduates. Business and health fields, for example, are among the best-paying majors, with the median 25- to 59-year-old college graduate in both fields earning \$65,000 in 2013.<sup>59</sup> The median graduate with an education major, meanwhile, earned just \$45,000 per year.<sup>60</sup> These disparities in outcomes mean there can at times be a tension between the majors that lead to the greatest gains in standards of living and those that are needed within a community. Given that tension, policymakers and university administrators must consider how to best balance supporting programs that lead to upward mobility while ensuring that there are still qualified individuals to fill critical community roles, such as K-12 teachers and early-childhood educators.

#### 5. Even before COVID-19, stagnant revenue had created fiscal challenges for Great Lakes regional public universities, leaving them vulnerable to the current downturn.

Great Lakes regional public universities have faced fiscal challenges in recent years, brought on by declining appropriations and stagnant enrollment. On a per-student level, Great Lakes RPUs saw essentially no inflation-adjusted revenue growth from 2011 through 2016.<sup>61</sup> It has only been since 2017 that real revenue growth has finally picked up at schools across the region, growing by over 4% per year in both 2017 and 2018.

Now that progress is at risk. Given the anticipated hits to state budgets from the COVID-19 downturn, public higher education is likely to face nearly unprecedented fiscal headwinds in the coming months. Unfortunately, state underinvestment in recent years has put RPUs on already-shaky footing, leaving them with little margin to manage a new and significant revenue decline.

Subpar revenue growth is not limited to any one state in the region. While there is state-by-state variation, RPUs in four of the six Great Lakes states have had slower per-student revenue growth than the national RPU average since before the Great Recession, while one of the states that is above the national average (Illinois) is a significant outlier when it comes to higher education funding data. This suggests that poor revenue growth numbers aren't just a function of a single shock, but rather a more widespread structural issue throughout the region.

Illinois, for its part, has had unique funding problems that have made its revenue numbers an anomaly. In recent years, a significant portion of Illinois's higher education funding has been earmarked to cover shortfalls in its severely underfunded higher education employee retirement system.<sup>62</sup> So even as higher education revenue has technically increased in the state, it hasn't all been available for use by universities. These problems were compounded by a twoyear budget impasse from 2016 to 2018, which strained state higher education funding further.<sup>63</sup> As a result, the state's public universities are not as fiscally healthy as topline numbers would suggest.

This revenue stagnation has been driven by a combination of declining state appropriations and sluggish tuition growth. Per-student appropriations at Great Lakes regional public universities have declined by nearly 8% since 2006. Here, too, this decline hasn't been limited to just one or two states. Not a single Great Lakes state saw real growth in per-student appropriations from 2006 to 2017. And in 2018, the only state where RPU appropriations exceeded their 2006 level was Illinois-however, here again, Illinois is an outlier, as much of that funding went toward the state's higher education pension system and backfilling for two years of missed appropriations during the state's budget crisis.64

While flagships and public R1s have raised their tuition to historically high levels to compensate for the decline in per-student appropriations, increases in tuition and other revenues at Great Lakes RPUs have been limited. This has been a function of demographic pressure, university mission, and state policy. Since regional public universities don't have the same level of name recognition that flagships and R1s have, they are less able to attract out-of-state and international students. At the same time, administrators at these schools–particularly schools with an open-access mission–often work to avoid major

#### Change over time in per-student revenue

Regional public universities, real 2012 dollars; FY 2006 = 100



Note: 65 Great Lakes RPUs reported finance data every year from 2006 to 2018; 394 RPUs nationwide reported finance data every year from 2006 to 2018. Source: Brookings analysis of IPEDS data

#### FIGURE 13

#### Change over time in per-student appropriations

Regional public universities, real 2012 dollars; FY 2006 = 100



Note: 65 Great Lakes RPUs reported finance data every year from 2006 to 2018; 394 RPUs nationwide reported finance data every year from 2006 to 2018.

Source: Brookings analysis of IPEDS data

tuition increases that would price students out of higher education.<sup>65</sup> Both of these factors are undergirded by state laws that mandate in-state tuition discounts and restrictions on tuition increases for in-state students, which prevent RPUs from significantly raising tuition for most of their students.

This challenge has been particularly acute in the wake of the Great Recession. During the years leading into the recession and the immediate aftermath, from 2006 to 2011, states cut their appropriations to public universities. However, that revenue loss was more than made up for by tuition increases and significant increases in Pell Grants from the federal government. Since

2011, however, Pell Grants (classified in IPEDS under "federal nonoperating grants") have been shrinking on a per-student basis, meaning they no longer offset declines to state appropriations.<sup>66</sup> This has made tuition an even more important source of revenue for universities. But Great Lakes RPUs have been constrained from raising their tuition as much as other types of universities, destabilizing their revenue situation. This trend will likely be exacerbated in the coming months, as state budgets are crushed under the weight of the COVID-19 crisis. At the same time, regional public universities that do not open in the fall are likely to suffer a significant drop in revenue from auxiliary enterprises, such as housing and food services.

#### FIGURE 14



**Total per-student revenue change by source and university type** FY 2011-FY 2018. real 2012 dollars

Note: 65 Great Lakes RPUs reported finance data every year from 2006 to 2018; all 12 Great Lakes public flagships and R1s reported finance data every year from 2006 to 2018. Source: Brookings analysis of IPEDS data

The relative revenue difficulties that regional public universities face can be seen when comparing per-student revenue growth by source across different classes of universities. While Great Lakes flagships and R1s saw significant per-student appropriations declines between 2011 and 2018, they more than made up for it with tuition increases and other revenue-particularly revenue from hospitals. Indeed, increases in hospital revenue account for over 85% of the increase in "other revenues" for flagships and R1s in the figure below. Great Lakes RPUs, for their part, saw a modest increase in their 2018 state appropriations levels relative to 2011 (although 2018 appropriations were still below 2006 to 2010 levels). However, their increases in tuition and other revenues were significantly lower than their flagship and R1 counterparts. As a result, Great Lakes flagships and public R1s had nearly \$5,400 more in per-student revenue growth than RPUs in the region during this time.

Other policy changes at the state and federal levels have further strained regional public

universities' finances. On the state level, most states now use performance funding to allocate at least some portion of state funding to universities. While some states have a relatively small portion of appropriations tied to performance (which can include metrics such as time-to-degree, graduation and retention rates, and metrics around Pell Grant eligibility), a few states tie nearly all of their appropriations to performance.<sup>67</sup> This can become a problem for RPUs when it is coupled with declining overall appropriations from the state. For example, Ohio allocates nearly all of its state appropriations through a performance funding formula. At the same time, the state has continued to disinvest in public universities. From 2006 to 2018, real perstudent state appropriations declined by nearly 9%.<sup>68</sup> Under these circumstances, a university could improve its performance and still see a decline in state appropriations.<sup>69</sup>

State disinvestment can run counter to the goals of performance funding by reducing resources needed to implement proven strategies for



FIGURE 15

Note: 65 Great Lakes RPUs reported finance data every year from 2006 to 2018; all 12 Great Lakes public flagships and R1s reported finance data every year from 2006 to 2018.

Source: Brookings analysis of IPEDS data

improving student performance, such as smaller classes taught by tenured professors, enhanced co-requisite or supplemental remedial education, and other student supports.<sup>70</sup> The impacts of disinvestment are often magnified at RPUs, as these schools have less ability to raise tuition or turn to other sources of revenue to plug funding gaps. Researchers David Deming and Christopher Walters found that state budget cuts had significant negative impacts on degree attainment at mid-tier public colleges and universities.<sup>71</sup> At the same time, performance funding awards public flagships and R1s more than RPUs in many states, essentially codifying long-standing public disparities between sectors.<sup>72</sup> However, many state policymakers may not have a choice in defunding RPUs in the coming months, as state revenues take a hit from COVID-19. In this regard, more federal action is warranted to cover gaps on behalf of states and encourage them to restore and grow funding for higher education when their economies recover. In recent years, this state disinvestment has been coupled with a decline in federal research dollars-one of the major forms of federal higher education support-going to regional public universities. From 2006 to 2018, per-student federal operating grants (the category that encompasses research grants) declined by nearly 37% at RPUs in the Great Lakes region.<sup>73</sup> While regional public universities' research operations are smaller than their R1 counterparts, this nonetheless further strains RPUs' fiscal situation and reduces their ability to conduct research that would have positive economic and social spillover effects for their communities.

As revenue at Great Lakes regional public universities has stagnated, the gap between public flagships and R1s and RPUs in the region continues to grow. In 2006, Great Lakes public flagships and R1s took in 3.26 times as much revenue as Great Lakes RPUs. By 2018, Great Lakes public flagships and R1s were taking in 3.34 times as much revenue as RPUs in the region. This gap means that flagships and public R1s have significantly more resources for instruction, student experience, research, and community engagement. It also provides flagships and public

R1s with a substantially larger financial cushion and more flexibility to manage the ongoing crisis. In this regard, as with others, regional public universities continue to fall further behind. How have Great Lakes regional public universities responded to these constrained resources? Prior to 2011, Great Lakes RPU expenditures showed year-over-year growth, driven by tuition increases and growth in federal nonoperating grants (mostly Pell Grants). However, as revenue has become more constrained since 2011, universities have had to adjust expenditures accordingly. As multiple studies have shown, RPUs were already highly efficient with state dollars.<sup>74</sup> Given that, cutbacks in spending at RPUs are likely to have negative impacts on students and communitiesparticularly those that are the most vulnerable.

Before 2018, Great Lakes RPUs had yet to cut back on their "core" mission, and expenditures on instruction, academic support, student services (such as child care for working parents), and institutional support (i.e., administrative services spending) had seen double-digit growth since 2011. However, in 2018, total expenditures on instruction, academic support, and student services fell-both in inflation-adjusted and nominal terms. On a per-student level, inflationadjusted overall spending by Great Lakes RPUs fell by over 4% in 2018, including spending reductions on instruction and student services. This suggests that schools had begun scaling back expenditures in core areas even before the onset of the COVID-19 crisis. It's worth noting that RPUs spent less on a per-student basis than flagships and public R1s in every expenditure category, demonstrating these schools' relative financial efficiency.

Prior to 2018, cutbacks had come in the areas of research, public service, and scholarship and fellowship expenses. Great Lakes RPUs have reduced spending on public service–which includes community services, cooperative extension services, and other activities that provide noninstructional services to individuals and groups external to the university–by over 3% on a per-student basis since 2011. Likewise, expenditures on research have seen basically
#### TABLE 3

#### Per-student expenditures by category

Great Lakes regional public universities

Metro area	FY 2011	FY 2018	FY11-FY18 % Change
Instruction	\$6,060	\$6,693	10.4%
Research	\$811	\$811	0.0%
Public service	\$660	\$640	-3.1%
Academic support	\$1,722	\$2,189	27.1%
Student services	\$1,149	\$1,329	15.6%
Institutional support	\$1,425	\$1,602	12.4%
Scholarships and fellowships	\$780	\$739	-5.2%
Auxiliary enterprises	\$2,404	\$2,535	5.4%
Other expenses	\$553	\$413	-25.3%
Total expenses	\$15,565	\$16,952	8.9%

Note: Data reflects the 68 Great Lakes regional public universities that existed during the 2017-2018 academic year. Numbers do not sum due to rounding.

Source: Brookings analysis of IPEDS data

no growth since 2011. Scholarship expenses, which account for the portion of scholarships and fellowships that are paid out as direct grants made to students (and thus exclude the majority of scholarship money, which is provided to students as a credit on their account and therefore not accounted for as an "expense"), have declined by even more, falling by 11.3% on a per-student basis.<sup>75</sup> Paradoxically however, many schools have been awarding more merit scholarships in recent years, both to attract more academically qualified students and to be more competitive with other institutions.<sup>76</sup> It is perhaps unsurprising that these three categories are deprioritized when universities are trying to allocate scarce resources. They are among the smallest expense categories for universities; the three categories combined accounted for less than 13% of spending at Great Lakes RPUs in 2017. They also aren't among the "core" services offered for students and have recently had precarious funding situations. Federal research funding–which is backed by federal operating grants to universities–has been declining for regional public universities since 2011. And public service expenses often don't cleanly align with universities' revenue sources, so when resources are constrained, there is little additional funding to allocate to these initiatives.<sup>77</sup>

These patterns are even more acute when assessed by total spending rather than perstudent spending. For the public service and research expense categories, total spending is a useful measure because these are areas of spending that have significant economic and social impacts outside of the university community. From 2011 to 2017, Great Lakes RPUs reduced their total spending on public service by over 13% and their total spending on research by over 10%.

Because of stagnant revenue, Great Lakes regional public universities have seen an erosion in their operating margin. In FY 2011, Great Lakes RPUs took in over \$1,400 more than they spent per student. But by FY 2016, that margin had eroded to just \$9, before climbing to \$117 in FY 2017. In 2018, their operating margin increased to over \$1,600 per student as revenue climbed while expenses decreased. So, while schools had, until 2018, protected spending increases in areas such as instruction and academic support over the prior decade– upholding their student-centered and openaccess missions–new growth in those areas came at the expense of spending elsewhere. Furthermore, even in areas where RPUs have continued to invest, spending growth has not kept pace with R1s. Unfortunately, it's likely these recent gains will be wiped out by the forthcoming disruption from the COVID-19 downturn and its aftermath, potentially putting regional public universities in an even worse financial situation than they found themselves in a few years ago.

For example, even as universities move to distance learning, they will still need to maintain significant personnel costs around instruction, academic support, and some student services. They will likewise still have outlays for auxiliary enterprises such as building maintenance and repair. However, they will lose significant sources of revenue in the form of reduced state appropriations as well as foregone housing and food service revenue. Likewise, it's not yet clear

#### FIGURE 16



Great Lakes RPUs, real 2012 dollars

Per-student revenue and expenses

Note: Analysis done using the 65 Great Lakes RPUs that reported finance data every year from 2006 to 2017. Source: Brookings analysis of IPEDS data

how students will react to the move to distance learning. Some students may choose to transfer, withdraw their attendance, or take a gap yearany of which would reduce tuition revenue.

All of this will have effects on the broader economy, particularly if RPUs in the Great Lakes region are forced to cut back further on financial support for placemaking, research, and public service. As the downturn turns into recovery, robust community investment from RPUs will go a long way toward restoring economic health for many places in the U.S., particularly in small communities that do not have robust tax bases, agglomeration economies, or nonprofit sectors. However, years of disinvestment combined with the most recent shock will make it difficult for regional public universities to fulfil this critical role. This provides a policy imperative not only to rectify the funding situation that these schools face, but also to make further, more robust investments in regional public universities.





## Takeaways

Regional public universities enhance educational access and support growth in their communities. In this regard, they can play a central role in promoting recovery in the wake of the COVID-19 downturn. However, financial and policy neglect in recent years has made it more difficult for them to achieve that mission, and incomplete information about these schools and their students makes it more difficult to formulate effective policy and assess their impact.

The significant damage to state budgets over the next year is likely to severely harm public higher education funding. During the Great Recession, states lost nearly \$600 billion in tax revenue, which led to sustained disinvestment in higher education.<sup>78</sup> It's possible the current crisis could lead to even more losses, which will fall hard on educational appropriations.

And while an economic downturn may lead more individuals to pursue higher education, demographic changes such as shrinking high school graduating classes and stagnant population growth-as well as competition from community colleges and for-profit institutionscould blunt any enrollment growth for Great Lakes RPUs. This financial stress will come at a time where regional public universities were already operating on thin margins, having gone for over half a decade with almost no real revenue growth. All of this will make it more financially difficult for RPUs to maintain their open-access, community-oriented missions.

The crisis unfolding in the Great Lakes region is not an isolated incident. Universities of all types are facing new and unprecedented uncertainty, as their entire business models are upended. A new approach, which includes significant federal engagement on behalf of RPUs, is needed to support these schools and the communities in which they are situated. One of the rare upsides of the COVID-19 crisis has been the ability of policymakers to act quickly and in a bipartisan manner to provide essential relief to the economy. However, the relief provided to date for higher education has not been sufficient. Policymakers should seize this moment and direct a significant portion of the next stimulus or recovery bill toward public education nationwide.

At the same time, RPUs in the Great Lakes region were already facing stresses before the COVID-19 crisis. In this regard, the region is a harbinger of future slow-moving crises that other regions could face as their population growth slows. Any policy supports should take a long-run view, to not only help these schools and communities recover, but to also ensure that regional public universities don't fall into the same dire financial straits in the future.

Policymakers should work across four areas to strengthen these schools' well-being. They should:

- Restore essential financial support for regional public universities
- Bolster regional public universities' placesensitive missions
- Encourage greater enrollment by nontraditional students
- Improve data quality for regional public universities and students.





# Implications for policy

# Restore essential financial support for regional public universities

Regional public universities are likely to face several significant financial obstacles as a result of COVID-19 and its impact on state budgets. Even before the current crisis, RPUs were operating with thinner margins and lower levels of state appropriations than they were in the last decade.

In response, federal policymakers must reevaluate higher education funding structures to improve the financial situation of RPUs. They should take the following steps to do so:

- Create an emergency federal fund to protect appropriations for public universities
- Provide dedicated funding to support students with additional educational needs

To start, Congress should act quickly to create an emergency federal fund to protect appropriations for public universities as part of a COVID-19 stimulus or recovery package. States and local municipalities will likely face unprecedented budget shortfalls as tax revenues dry up. Based on how governments have acted during previous recessions, they are likely to cut funding to higher education to make budget numbers work.

Even during the last period of economic recovery, state appropriations for higher education remained well below where they were before the Great Recession. Inflation-adjusted state appropriations at Great Lakes RPUs remained over 16% below 2009 levels in 2018, and nearly 13% below 2006 levels. This resulted in a loss of over \$600 million in real funding for Great Lakes RPUs.<sup>79</sup> Given that, the federal government should step in to protect higher education funding, ideally as part of a more comprehensive state and local aid package. Funds can be based on projected state revenue declines and should be used to offset any necessary reductions to higher education appropriations for the next two years. To prevent states from zeroing out funding in response to federal aid, federal policymakers could include a state maintenance-of-effort provision, requiring that combined state and local funding going to each school cannot be less than their 2018 level of state appropriations, plus inflation.

Next, federal policymakers should provide dedicated funding to support students with additional educational needs. Regional public universities have a stronger open-access mission than flagship and R1 schools, which is important for reducing inequities in university access. A byproduct of greater accessibility, though, is these students often require supports such as additional instruction in core areas, nonacademic skills training (such as "soft skill" development), and wraparound supports such as child care for adult students. Each of these supports requires funding above-and-beyond what many RPUs currently receive. Even before the COVID-19 crisis, many RPUs had fewer resources to provide these types of supports than their flagship and public R1 counterparts. If states enter a budget crisis, it's likely schools will be able to provide even fewer supports.

Funding could be targeted to schools that enroll a greater share of students from low-income households, or from underrepresented groups. After two years, federal policymakers could consider cost-sharing provisions to bolster funding and encourage states to invest in further developing their population's human capital.

Providing dedicated supports for schools that admit a greater share of students with additional educational needs can help preserve regional public universities' open-access missions, and also begin rectifying some of the funding imbalances that exist among different types of universities. Given the significant share of placebound students at these schools, many will likely remain in-state after graduation. In this regard, states are enhancing their own human capital, which will be critical to jump-starting economic recovery.

#### Bolster regional public universities' place-sensitive missions

Regional public universities do more than educate students-they are also economic anchors for communities. The national recovery in the aftermath of the Great Recession was uneven, leaving hundreds of distressed, "left-behind" communities around the country. To avoid a similar patchwork recovery after the COVID-19 crisis, policymakers must do more to leverage RPUs as economic engines and placemaking entities. To that end, policymakers should take the following steps:

- Create a new land-grant-style program for regional public universities
- Modernize the extension missions of landgrant universities
- Rapidly scale up federal and state research funding to regional public universities
- Develop university-based anchor strategies to foster growth and redevelopment

On a federal level, policymakers should acknowledge the role that RPUs play in supporting communities throughout the U.S. by providing more dedicated federal funding for this class of universities, with an eye toward their economic development and recovery missions. To do so, Congress should **create a new land-grantstyle program for regional public universities** that would provide more robust funding to support these schools' community and regional development missions.

Such a program could be modeled on the existing land-grant program, with updates for 21st century community needs. As a starting point, Congress could replicate the Equity in Educational LandGrant Status Act of 1994, which designated 29 tribal colleges and universities (now 36) as landgrant institutions. The law created an endowment fund for those schools, from which interest distributions are allocated to each on a formula basis to use for a variety of essential university needs. These land-grant schools can also receive federal research funds through certain competitive grant programs.<sup>80</sup>

A land-grant-style program for regional public universities should establish a new endowment fund on behalf of RPUs. Interest distributions from this fund could be used at the universities' discretion to support activities similar to those outlined by the 1994 program, including curricula design, faculty development, instruction delivery systems and equipment, student experiential learning, student recruitment and retention activities, and facility construction and maintenance to support schools' "stewardship-ofplace" mission.<sup>81</sup>



Establishing an endowment fund on behalf of regional public universities would also help mitigate the financial discrepancies between flagships and public R1s and RPUs. For example, the 12 flagships and public R1s in the Great Lakes region have endowment assets worth a combined \$35 billion, led by the University of Michigan's nearly \$12 billion endowment.<sup>82</sup> These assets provide a significant source of revenue for large research universities that is relatively independent of demographic pressures or the year-to-year whims of state legislators.

How much funding would be necessary to establish an adequately sized program? One helpful benchmark is looking at the amount of funding that current land-grant universities receive. In FY 2018, the 53 land-grant 1862 universities (the original land-grant schools designated under the Morrill Act of 1862) received an average of \$4.6 million in research appropriations per school. This number is less than 2% of the \$209 million per year that RPUs averaged in total expenditures in FY 2017.83 A more significant target, then, may be an endowment that disperses an average of \$10 million per school per year, which would account for nearly 5% of RPU expenditures on average. The actual disbursement could be tied to the size of the school.

Policymakers could leverage a variety of curricula to determine what schools should be eligible to receive funding. They could support schools that are within or adjacent to a distressed county, that are a significant distance (e.g., 60 miles or more) from the next closest public university, or that maintain an open enrollment policy.

If 300 schools were included in the program, that would require an annual disbursement of \$3 billion. To generate a \$3 billion annual yield, an endowment would need \$100 billion (assuming a 3% annual return). For context, the Department of Education spends approximately \$30 billion annually on Pell Grants, so this amount would be roughly equivalent to just over three years of Pell Grant funding. Congress should also consider making additional funds available on a competitive-grant basis to support research at RPUs, enhance extension programs, or incentivize innovative forms of community development.

Schools that qualified for the program could receive a guaranteed five years of funding. After five years, Congress could evaluate the program to determine if it was meeting educational and economic development goals, and adjust as necessary.

If structured properly, this program could not only provide a steady source of funding for regional public universities, but could also alleviate the ongoing erosion of state funding to RPUs. Congress could enact state maintenanceof-effort provisions to prevent states from reducing their own funding once federal funding is disbursed. State matching provisions could also be phased in to require states to meet certain funding benchmarks for RPUs.

Some policymakers have suggested similar ideas. Rep. Ro Khanna (D-Calif.) has proposed a "land grant for the 21st century," which he calls the "United States Technology Institute." This proposal would establish a five-year federal grant program at the Department of Commerce which would provide between \$50 million and \$100 million to 50 two- and four-year colleges in socalled "left behind communities."<sup>84</sup>

Regional public universities conduct locally focused research with, at times, national implications. However, federal research funding to RPUs is in decline. Given the important role that research plays in fostering economic and community development, federal policymakers should reverse this trend and rapidly scale up federal and state research funding to regional public universities, taking care to utilize RPUs' strengths. Federal policymakers could create a new federal research funding steam focused on community-oriented research with potential national implications. Community-focused research is common at RPUs, even those that do not classify as an R2 or R3 research university.<sup>85</sup> Congress could also provide more robust support for areas of research that have significant

economic spillover effects, such as those related to advanced industries, artificial intelligence, or other emerging fields.<sup>86</sup>

One potential model, suggested by the Democracy Collaborative at the University of Maryland, would be a new federal program modeled on the National Science Foundation's (NSF) grant programs, which would provide grant funding for scholars conducting communitybased research.<sup>87</sup> For example, the existing NSF Faculty Early Career Development (CAREER) Program provides funding for early-career scholars, with a focus on integrating education and research.<sup>88</sup> That model could be leveraged to fund RPU scholars who are conducting community-focused research, particularly because many RPU scholars also have a strong teaching orientation.

Policymakers and state university systems could also leverage regional public universities to support broader research initiatives in fields of vital state or national interest. Funding could be allocated to RPUs on their own, as well as coordinated in conjunction with public R1s or system-wide initiatives. One state-level initiative that is leveraging this approach is the Illinois Innovation Network (IIN).<sup>89</sup> The IIN has designated public universities across the state (both R1s and RPUs) as hubs for different areas of research deemed critical to the state's economic and community interest. For example, Governors State University is establishing a Supply Chain Innovation Center and Business Incubator, while Eastern Illinois University is expanding its Center for Clean Energy Research and Education.<sup>90</sup>

To make research findings more actionable for firms and communities, Congress should pass new legislation to **modernize the extension missions of land-grant universities**. The Smith-Lever Act of 1914 and subsequent legislation authorized appropriations for the purposes of agricultural and forestry extension, or bringing the findings from agricultural and forestry research to people who could put them into practice.<sup>91</sup> At the same time, the Commerce Department runs the separate Manufacturing Extension Partnership (MEP), designed to bring advances in manufacturing techniques and technology to small manufacturers across the country. This original land-grant research and extension mission, as well as the MEP, remain vital economic supports for our nation's agricultural, forestry, and manufacturing communities.

To that end, the extension mission should be expanded to include emerging fields of national economic interest. Extension support could be used to bring vital advances in digital technologies, artificial intelligence, and other emerging areas to smaller businesses and communities across the country. Likewise, many communities would benefit from greater support for fostering entrepreneurship and startups, business services for smaller firms, and customized trainings crafted for local firms. Given their nationwide presence, RPUs could serve not only as hubs of research, but as effective intermediaries for extension efforts.

On the local level, states, communities, and institutions should coordinate to **develop university-based anchor strategies to foster growth and redevelopment**. These can include efforts such as downtown redevelopments, enhancing public-facing amenities, and strengthening connections between universities and businesses, all of which should be undergirded by shared visions between schools and communities.

One of the core ways that regional public universities already support communities is through their physical infrastructure assets. Universities' footprints constitute a significant source of built capital, often as core parts of downtown districts or as significant campuses elsewhere in a community. Communities should work with universities to determine how to incorporate university assets into their development plans. For example, universities can locate residence halls, labs, bookstores, classroom space, and other linkages downtown, which can be collocated with restaurants, hotels, and other amenities. Some assets, such as theaters or conference centers, could be managed as joint partnerships between communities and universities. For example, the city of Morris, Minn. maintains joint-use athletic facilities with the University of Minnesota Morris and the local school district.<sup>92</sup> This arrangement provides the community with facilities that none of the entities would be able to afford on their own.

In times of emergency–such as the COVID-19 pandemic–university campuses take on new roles as health care and emergency-response auxiliaries. For example, Grand Valley State University turned its Center for Health Sciences into a contingency space to treat non-COVID-19 patients should local hospitals beds fill up with COVID-19 cases.<sup>93</sup> Across the state, in eastern Michigan, Saginaw Valley State University partnered with Saginaw-based Old Town Distillery to manufacture hand sanitizer for health care professionals.<sup>94</sup>

State and local governments should also provide support for public-facing services and amenities that can be run through universities. For example, students studying health professions can provide public health clinics for residents. Universities, in partnership with communities, can support amenities such as museums to help



preserve local culture. And localities can work with universities to provide community-oriented investments in areas such as transportation infrastructure and public safety.

As crisis response turns to recovery, policymakers should support efforts to connect universities and the business community to stimulate job growth. For example, smaller research universities can act as intermediaries between university researchers and investors and businesses. States and localities can support these efforts by financing research-oriented RPUs' creation of incubators, accelerators, or makerspaces. State innovation voucher programs-such as Rhode Island's Innovation Voucher or the Maryland Industrial Partnerships Program-can provide financial support for firms to pay for university support in solving research problems.<sup>95</sup>

Other communities may engage with RPUs as part of innovation districts. These urban areas combine university research facilities with professional and cultural amenities in dense, walkable spaces where workers and firms can collocate.<sup>96</sup> When pursued properly, these districts can promote inclusive growth. A welldesigned innovation district not only provides opportunities for universities and companies, but also supports neighborhood revitalization, poverty alleviation, and quality employment opportunities (including at the sub-baccalaureate level) for existing residents.

These efforts require a shared vision and cooperation between communities and universities. Community and university officials should align their needs through well-crafted city-anchor compacts, such as a community benefits agreement. A well-structured agreement will include a clear delineation of the roles that different actors (e.g., government and universities) will play, the financial (and other) resources each will provide, and regular revisions, touchpoints, and other accountability provisions to keep parties on track.<sup>97</sup>

Philanthropy can also serve a role in the shortto-medium term to jump-start these efforts, particularly when localities are cash-strapped, as in the COVID-19 crisis. While philanthropic efforts cannot be a wholesale replacement of state and local support, they can serve as a bridge to help communities weather immediate fiscal crises until state and federal efforts are scaled up.

Many RPUs already conduct this sort of work, but they don't have the marketing and publicrelations resources that state flagships and public R1s have. As a result, efforts can go unnoticed by policymakers and investors outside of the region. To remedy that, states could provide greater resources for universities to tell their stories, such as through systemwide marketing initiatives on behalf of all regional public universities in a state.

# Encourage greater enrollment by nontraditional students

While it's possible that an economic downturn could lead to a spike in enrollments at regional public universities, any increase is likely to be temporary. To that end, enrollment growth in the coming months may not be enough to overcome the longer-term demographic trends affecting the Great Lakes region. With a shrinking cohort of high school graduates, universities must work to find new sources of "nontraditional" enrollment such as working professionals, as well as ensure their offerings remain relevant for the 21st century. Among the steps policymakers and universities can take are:

- Provide a new federal funding stream to help universities recruit adults to reenroll
- Make high-demand fields and fields of critical community need more accessible to working professionals
- Support liberal arts fields and link them more clearly to the labor market
- Incorporate a "career exploration" approach
- Support direct collaboration between industry and universities
- Fund paid experiential learning programs to help students get labor market experience

As part of the next phase of COVID-19 economic stimulus, Congress should provide a **new federal** funding stream to help universities recruit adults to reenroll. Funds could go toward helping universities provide financial and policy supports that adult learners need, such as greater access to free or low-cost onsite child care. Funding could also go toward improving online learning capacity at regional public universities, which would both help schools weather an extended period of social distancing as well as prepare them to better reach students who cannot consistently come to campus. Efforts could include providing free or subsidized home broadband access for enrolled students, as well as free or low-cost laptop sales and rentals.

At the same time, flagships and public R1s could do more to assist their regional counterparts, whether through providing resources and expertise to support outreach efforts or through referring applicants to regional public universities when they are a better fit. States could also take the same approach as Idaho, which automatically admits students meeting a combination of requirements to every public university and community college in the state.<sup>98</sup> Universities should continue to bolster enrollment in high-demand areas such as health care, emergency preparedness, and business. These career-focused fields can be more attractive to working professionals, as they offer clear linkages to job placements after graduation. Given stagnant growth in the number of traditional university-aged students in the Great Lakes region, these programs offer RPUs one of the best opportunities to attract new students and reverse declining enrollment. These fields also fill essential community needs, and given that graduates of RPUs are more likely to stay in the region after graduation, this is another way that RPUs can support community preparedness and redevelopment.

To do so, universities should work to **make high-demand fields and fields of critical community need more accessible to working professionals**. Many schools are already adding more undergraduate night and weekend courses. Schools should continue to assess which programs have the highest levels of adult enrollment, and work to offer more classes that don't conflict with work hours. From there, schools should take steps to ease degree



completion for adult students. For example, schools could align noncredit offerings into degree programs to take advantage of growing enrollment in nondegree certificate programs.<sup>99</sup> This could also help students who have previous higher educational experience but have had breaks in their education.

Meanwhile, enrollment is declining nationwide in liberal arts fields that aren't perceived to have as direct of a connection to the labor market.<sup>100</sup> This trend isn't exclusive to RPUs; indeed, RPUs have seen smaller declines in liberal arts fields than their R1 and private counterparts.<sup>101</sup> But that doesn't means RPUs are impervious, as evidenced by instances such as the University of Wisconsin-Stevens Point's attempt to eliminate over a dozen liberal arts and related majors in 2018.<sup>102</sup>

The skills developed in liberal arts fields remain important even in an increasingly digital economy. For example, while the hard technology skills that students learn in STEM programs provide an immediate earnings boost, they become less relevant (or even obsolete) over time as technologies change. Liberal arts and humanities, on the other hand, foster versatile skills such as problem-solving and adaptability that can help graduates navigate a variety of jobs over the course of their career.<sup>103</sup>

As workers mature and move from entry-level jobs to mid-career and management positions, the latter set of human-focused skills becomes correspondingly more important. This is why evidence shows that, by mid-career, liberal arts and social sciences majors earn as much as students who majored in STEM fields.<sup>104</sup> Abandoning liberal arts curricula and the important skills they provide would have a particularly negative impact on place-bound students-particularly those in rural areas, for whom their local RPU is often their only option.<sup>105</sup>

Given that, rather than abandoning them, universities should **support liberal arts fields and link them more clearly to the labor**  market. To start, universities should incorporate complementary skills into liberal arts majors to more clearly demonstrate the labor market applicability of these fields of study. Technical or analytic skills such as proficiency in digital platforms, programming, or data analysis are in demand across career areas and can enhance individuals' overall earnings.<sup>106</sup> To do so, universities can develop new liberal arts programs in response to new areas of demand from employers and students. For example, schools can launch professionally oriented minors as part of traditional liberal arts fields such as history and English. Or schools can create careeroriented mini-classes or certifications in areas such as data analysis or instructional design.<sup>107</sup> Faculty can leverage introductory courses to communicate the potential career value of their field of study.

One example of a school that has managed this transition is Cleveland State University. With an emphasis on "transferrable skills," Cleveland State kept its liberal arts core but worked with employers to add career-relevant experiences to classes and educate regional employers on the benefits of a liberal arts degree.<sup>108</sup> Universities and faculty can leverage initiatives such as the American Historical Association's Tuning Project, which spells out the distinctive skills and methods that the history field teaches, in order to communicate the skills students will acquire in the field and how to link them to a career.<sup>109</sup>

More broadly, regional public universities should **incorporate a "career exploration" approach**, whereby students are exposed to career options throughout their entire educational experience.<sup>110</sup> Given the very real possibility of an extended COVID-19 downturn with historically high unemployment levels, university students and graduates will benefit from continued labor market guidance. Exposing students to career pathways throughout their educational experience can be particularly helpful for firstgeneration students and other students with limited networks, who enroll at RPUs in higher rates. State policymakers should provide resources to support direct collaboration between industry and universities. Universities could leverage these resources in a variety of ways to strengthen industry-university links. For example, universities could host planning sessions where industry partners describe competency needs while universities work to map curricula to those needs. They could also develop externships for university faculty in industry settings to help foster an understanding of local employer needs.<sup>111</sup> Smaller research universities should leverage relationships through industrysponsored research efforts to align curricula to employer needs and create more opportunities for student work experience with local industry partners.<sup>112</sup>

#### Along those lines, policymakers should **fund paid experiential learning programs to help students get labor market experience**.

Experiential learning models such as apprenticeships, paid internships, and co-ops help students apply what they've learned in the classroom to an operative professional setting, give them essential soft skills, and help them develop professional networks.<sup>113</sup> All of these benefits are more important during times of declining labor demand and high unemployment.

One promising model for this was proposed by former Economic Policy Institute researchers Kathryn Anne Edwards and Alexander Hertel-Fernandez. In this model, the Department of Education would administer competitive grants to colleges and universities, who would, in turn, implement internship support programs for lowincome students.<sup>114</sup> Similar programs already exist in many private and elite universities, so their proposal would favor small and low-income public and community colleges.<sup>115</sup> Edwards and Hertel-Fernandez recommend leveraging this program to support work at nonprofit organizations, independent work, or student research experiences monitored by faculty.<sup>116</sup> This could support work and research with a community development focus, thereby further enhancing RPUs' place-oriented missions.

Universities should also take care to align internship opportunities with majors and programs of study. This not only to distills the relevance of skills developed within a major for students, but can also help demonstrate to policymakers the regional workforce contributions of RPUs.

# Improve data quality for regional public universities and students

Federal higher education statistics-in particular, the Department of Education's Integrated Postsecondary Education Data System-have a variety of shortcomings that disproportionately affect regional public universities. For example, while IPEDS graduation rate data is useful for private elite universities and more selective flagships and R1s, it leaves out a significant share of students attending RPUs. Data shortcomings such as this make it harder for administrators and policymakers to make informed decisions about universities and limit higher education data's usefulness for workforce development during times of labor market stress.



These problems were laid bare by this spring's \$12 billion allocation for higher education institutions in the COVID-19 relief package. Congress distributed 75% of the package's funding based on the number full-time Pell Grant recipients enrolled at each school.<sup>117</sup> The "fulltime" provision has proven to be an issue for RPUs, as these schools, along with community colleges, enroll a lower share of full-time students than their flagship and public R1 counterparts. As a result, RPUs and community colleges have received less per-student funding than flagships and public R1s-creating yet another funding disparity between these classes of schools.<sup>118</sup>

The relative unreliability of IPEDS data has long been an issue. In response, the Department of Education has introduced several new "outcomes" measures in recent years to more accurately track student progress. First, it began tracking four different "cohorts" of students: (1) first-time full-time students, (2) first-time part-time, (3) non-first-time full-time, and (4) non-first time part-time. Next, beginning with the 2017 school year, IPEDS has published six-year graduation rates for recipients of Pell Grants and subsidized Stafford Loans. This is the first time the federal database has tracked outcomes for students receiving federal student aid.

However, despite these recent efforts, there remain a variety of shortcomings to IPEDS data. For example, IPEDS still doesn't track outcomes of so-called "mixed enrollment" students (students that shift back and forth between part time and full time).<sup>119</sup> And because IPEDS data tracks cohorts of students that start college together, rather than individual students, it is impossible to link a student across different schools or enrollment statuses.

One way to overcome these data shortcomings would be to **create a federally backed student unit record system**, in which every school receiving federal funding provides studentlevel data to track more detailed outcomes. A student unit record system would track where students enroll after they leave one institution, and if and where they ultimately graduate with

a degree or certification. Such a system would not only provide a more accurate picture of university performance, but would also help policymakers and universities manage workforce development and enrollment during times of economic turbulence. Such a system could allow policymakers and universities to more accurately target workers who could benefit from a return to higher education (such as unemployed workers with some college but no degree) and provide them information about reenrolling. Likewise, if universities had more accurate student outcome information, they could provide a more detailed picture of local workforce capabilities for economic development agencies as communities seek to rebuild from COVID-19.

However, such a record has been prohibited by federal law since 2008.<sup>120</sup> While public universities-and RPUs in particular-have been proponents a student unit record system, private universities have opposed the effort. The National Association of Independent Colleges and Universities (NAICU) cites privacy as its chief concern with such a system, but many in the privacy and higher education community believe the organization is instead more concerned with protecting poor-performing private universities that rely on federal financial aid.<sup>121</sup>

Somewhat ironically, a national (but not federal government-run) student record system already exists, and more than 98% of schools participate in it. The National Student Clearinghouse-a private, nonprofit organization established in 1993 to help administer federal loans-maintains a nationwide set of student data, and is able to link students across institutions to measure outcomes.<sup>122</sup> While the National Student Clearinghouse maintains some of the information that would be most useful in establishing a federal student unit record system (such as enrollment status, graduation date, and some academic major data), it does not capture other information that schools and policymakers would want, such as data on the income of graduates and students who didn't complete their degree.<sup>123</sup> Likewise, because the National Student Clearinghouse is not a federal agency, the data

it houses belongs to the institutions that provide it. As a result, data is not shared without the permission of those institutions.<sup>124</sup>

In 2013, a group of six higher education associations, with backing from the Bill & Melinda Gates Foundation, worked together to create the Student Achievement Measure (SAM)-a free, public-facing, student-based measure of university outcomes based on National Student Clearinghouse data. SAM provides a more comprehensive picture of student "success" than graduation rates alone, including whether students transferred to another school and graduated, or transferred to another school and remain enrolled. However, because they must voluntarily join SAM, not all schools participate. While over 70% of RPUs nationwide participate in SAM (and over 80% of Great Lakes RPUs) only a small number of private colleges participate.<sup>125</sup> This limits SAM's ability to provide a comprehensive picture of how students move across higher education. A federal system providing comprehensive data for every school receiving federal aid would be preferable.

Since 2017, a bipartisan group of senators led by Bill Cassidy (R-La.), Elizabeth Warren (D-Mass.), and Sheldon Whitehouse (D-R.I.) has introduced legislation to repeal the 2008 ban and create a federal student unit record system.<sup>126</sup> The bill, the College Transparency Act, would not create a new database within the Department of Education, but instead authorize the federal government to connect data that it already collects. The bill contains several privacy protections, including a ban on the sale of data, a prohibition on access by law enforcement, and limits on personally identifiable information.<sup>127</sup> While the Senate has yet to take action on any of the bills, as of the time of publication, the House of Representatives had passed the College Transparency Act out of committee as part of a broader overhaul of higher education.<sup>128</sup>

In absence of federal action, states should consider coordinating among themselves. For example, state policymakers in the Great Lakes region could **create an interstate Great Lakes student unit record system**, modeled on recent federal efforts. Illinois, for its part, has been a leader on this issue. Since 2012, Illinois has maintained a state-level student unit record system known as the Illinois Higher Education Information System (IHEIS).<sup>129</sup> However, the system only tracks non-community-college degree-granting institutions within Illinois.

Such regional approaches have precedent. For example, the Western Interstate Commission for Higher Education (WICHE), a regional organization that facilitates resource sharing among universities in 10 Western states, developed the Multistate Longitudinal Data Exchange (MLDE) to share individual-level education and workforce data within member states.<sup>130</sup> A regional approach that captures every higher education institution would allow states to track the outcomes of students that cross state lines to another state in the region, enhancing the amount of data available for policymakers, universities, and students themselves in making informed decisions.



## Conclusion

n the coming months, the U.S. will need to contend with the COVID-19 pandemic's economic and public health disruptions. Economically, these will include shuttered businesses, historically unprecedented levels of unemployment, and potentially weak growth for the foreseeable future. On the public health front, communities will need to navigate lingering COVID-19 caseloads and prepare for potential future outbreaks.

As generators of both economic activity and a skilled public health workforce, regional public universities are positioned to help communities navigate the worst periods of this downturn and promote a stronger recovery in the years to come. The effects of globalization and automation have battered the Great Lakes region and its manufacturing-heavy employment base– but its strong cadre of RPUs is a good sign for the potential to recover. These schools will not be able to fulfill their potential for economic growth and closing equity gaps if states continue to disinvest in them. Unfortunately, the COVID-19 crisis has come as a massive shock to state budgets, meaning states may not have any other option but to reduce funding for public higher education in the coming years.

However, decisive federal action to support RPUs-and indeed all public higher educationcoupled with a sustained reinvestment by states as the economy recovers, would help these schools live up to their full educational and economic recovery capacity. By doing so, policymakers can help the country avoid many of the pitfalls of the last recovery and make higher education more equitable for all Americans. **1.** Margaret Cahalan and others, *2019 Indicators* of *Higher Education Equity in the United States: Historical Trend Report* (Washington: The Pell Institute for the Study of Opportunity in Higher Education, Council for Opportunity in Education (COE), and Alliance for Higher Education and Democracy of the University of Pennsylvania (PennAHEAD), 2019).

#### 2. Ibid.

**3.** State Higher Education Executive Officers Association, *State Higher Education Finance: FY* 2018 (Boulder, CO, 2018).

#### 4. Ibid.

**5.** Rick Seltzer, "Squeezed From All Sides: Opportunities and Challenges for Regional Public Universities" (Washington: Inside Higher Ed, 2019).

**6.** See Alisa Hicklin Fryar, "The Comprehensive University: How It Came to Be and What It Is Now," in Mark Schneider and KC Dean, ed., *The University Next Door: What Is a Comprehensive University, Who Does It Educate, and Can It Survive?* (New York: Teachers College Press, 2015).

#### **7.** Ibid.

**8.** More specifically, this method defines regional comprehensive universities as bachelor's degreegranting, public, four-year universities that are not the primary research university in a state, land-grant universities with a history of research and graduate education, or institutions that were created or elevated with the express purpose of serving as research universities.

**9.** The Carnegie classification sorts universities into comparable groups by types of degrees awarded, level of research activity, and size of graduate programs. Using this method, Fryer defines regional comprehensive universities as public, four-year, nonresearch universities.

**10.** See 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 Cecilia Orphan, "Why Regional Comprehensive Universities Are Vital Parts of U.S. Higher Education" (Cambridge, Mass.: Scholars Strategy Network, 2018).

11. Seltzer, "Squeezed From All Sides."

**12.** Orphan, "Public Purpose Under Pressure;" see also American Association of State Colleges and Universities, "Stepping Forward as Stewards of Place: A Guide for Leading Public Engagement at State Colleges and Universities" (Washington, 2002).

**13.** This paper leverages the College Board's list of state flagship universities as its basis. In 42 states, the university labeled as the "flagship" by the College Board is also an R1 university, underscoring that they're clearly not regional public universities. In eight smaller states (Alaska, Idaho, Maine, North Dakota, Rhode Island, South Dakota, Vermont, and Wyoming), the flagship university named by the College Board is not an R1 university. However, even in those states, the flagship schools hold significant prominence, giving them more leverage to set tuition and attract out-of-state students, thus providing a level of independence from state appropriations.

**14.** See <u>https://www.nasfaa.org/2020</u>; see also Lauren Camera, "Where the 2020 Candidates Stand on Free College and Student Debt," U.S. News and World Report, September 12, 2019.

**15.** In in July 2018 the regional public university Indiana University-Purdue University Fort Wayne split into two separate schools, Indiana University Fort Wayne and Purdue University Fort Wayne. The two new schools share the same campus but are separate entities. Because the data in this report runs through 2018, it uses the old, combined Indiana University-Purdue University Fort Wayne.

**16.** Jason Horwitz and Samantha Superstine, "The Economic Footprint of Michigan's Fifteen Public Universities," (East Lansing, Mich.: Anderson Economic Group, 2013); see also factsheet on "The Economic Footprint of Michigan's Fifteen Public Universities."

**17.** Harvey Goldstein, Gunther Maier, and Michael Luger, "The University as an Instrument for Economic and Business Development: U.S. and European Comparisons," in David D. Dill and Barbara Sport, ed., *Emerging Patterns of Social Demand and University Reform: Through a Glass Darkly* (New York: IAU Press, 1995).

**18.** 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).

**19.** Harvey Goldstein and Joshua Drucker, "The Economic Development Impacts of Universities on Regions: Do Size and Distance Matter?" *Economic Development Quarterly* 20 (1) (2006): 22-43.

**20.** Joshua Drucker, "Reconsidering the Regional Economic Development Impacts of Higher Education Institutions in the United States," *Regional Studies* 50 (7) (2016): 1185-1202.

**21.** See Harvey A. Goldstein and Catherine S. Renault, "Contributions of Universities to Regional Economic Development: A Quasiexperimental Approach," *Regional Studies* 38 (7) (2004); Goldstein and Drucker, 2006; and Robert Huggins and Andrew Johnston, "The economic and innovation contribution of universities: a regional perspective," Environment and Planning C 27 (2009): 1088-1106.

**22.** See Orphan, "Public Purpose Under Pressure," 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).

**23.** Andrew Crookston and Gregory Hooks, "Community Colleges, Budget Cuts, and Jobs: The Impact of Community Colleges on Employment Growth in Rural U.S. Counties, 1976-2004," Sociology of Education 85 (4) (2012): 350-372.

**24.** Orphan and McClure, "Rural Anchor Institutions."

**25.** David Soo, "Envisioning A Regional Role: Comprehensive Universities and Conceptions of Their Regional Contributions." Ph.D. dissertation, University of Pennsylvania, 2011.

**26.** Kevin R. McClure, "Institutions of Opportunity: Using Presidents' Narratives to Re-tell the Story of Public Regional Universities," *Journal for the Study of Postsecondary and Tertiary Education* 3 (2018): 117-134, citing Hicklin Fryar, "The Comprehensive University."

**27.** 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.

**28.** Raj Chetty and others, "Mobility report cards: The role of colleges in intergenerational mobility" (Washington: Internal Revenue Service, 2017).

**29.** Jorge Klor de Alva, "Is the University Next Door the Way to Upward Mobility?" (Washington: American Enterprise Institute, 2019).

**30.** Seltzer, "Squeezed From All Sides;" and McClure, "Institutions of Opportunity."

**31.** See, for example, Bruce B. Henderson, *Teaching at the People's University: An Introduction to the State Comprehensive University* (Hoboken, NJ: John Wiley & Sons, 2006).

**32.** Orphan and McClure, "Rural Anchor Institutions;" and Hicklin Fryar, "The Comprehensive University."

**33.** Soo, "Envisioning A Regional Role;" and Orphan and McClure, "Rural Anchor Institutions."

**34.** See Barrett J. Taylor and Brendan Cantwell, Unequal Higher Education: Wealth, Status, and Student Opportunity (New Brunswick, NJ: Rutgers University Press, 2019); see also Scott Jaschik, "'Unequal Higher Education'," Inside Higher Ed, June 12, 2019.

35. Ibid.

36. Ibid.

#### **37.** Ibid.

**38.** Hendrickson, Muro, and Galston "Countering the geography of discontent."

**39.** This analysis includes counties in three types of communities: small metropolitan areas (with between approximately 50,000 and 250,000 people), micropolitan areas (with between approximately 10,000 and 50,000 people), and nonmetropolitan counties (typically with fewer than 10,000 people). It excludes counties in medium-sized metropolitan areas (with between 250,000 and 1 million people) and large metropolitan areas (with over 1 million people), because counties in communities those size often have multiple significant anchor institutions and benefit from significant agglomeration effects, making it difficult to attribute their economic performance to university presence. Likewise, many counties in medium-sized and large metropolitan areas contain both a public flagship or R1 as well as a regional public university, conflating their impacts. Excluding counties in these metro areas therefore lessens that issue.

**40.** From 2009 to 2017, counties in small metropolitan areas, micropolitan areas, and nonmetropolitan counties with a public or flagship university saw real per capita income increase by 11.2%. Those with a regional public university also saw real per capita income increase by 11.2%. Those with no university saw real per capita income increase by 13.3%. Source: Brookings analysis of IPEDS and Bureau of Economic Analysis data.

**41.** Mark Muro, Robert Maxim, and Jacob Whiton, "Automation and artificial intelligence: How machines are affecting people and places" (Washington: Brookings Institution, 2019).

**42.** Brookings analysis of IPEDS and Integrated Public Use Microdata Series (IPUMS) data.

**43.** Orphan and McClure, "Rural Anchor Institutions."

**44.** Brookings analysis of IPEDS and BEA data.

**45.** Andrew Barr and Sarah E. Turner, "Expanding Enrollments and Contracting State Budgets: The Effect of the Great Recession on Higher

Education," The Annals of the American Academy of Political and Social Science 650 (2013): 169-193.

#### 46. Ibid.

#### **47.** Ibid.

**48.** For more on predatory tactics leveraged by for-profit colleges, see William Roberts and Marissa Parker-Bair, "Predatory For-Profit Colleges Benefit From Washington's Culture of Corruption" (Washington: Center for American Progress, 2019); see also Genevieve (Genzie) Bonadies and others, "For-Profit Schools' Predatory Practices and Students of Color: A Mission to Enroll Rather than Educate." Harvard Law Review Blog, July 30, 2018; for information on student graduation rate by sector, see "Fast Facts: graduation rates," National Center for Education Statistics, https://nces.ed.gov/ fastfacts/display.asp?id=40; for more information on higher default rates at for-profit institutions, see Judith Scott-Clayton, "The looming student loan default crisis is worse than we thought" (Washington: Brookings Institution, 2018).

**49.** In 2016, the 66 Great Lakes RPUs that reported in-state/out-of-state data in both 2006 and 2016 enrolled 94,510 first-time in-state freshmen. This is compared to 48,219 first-time in-state freshmen enrolled at 12 flagships and R1s that reported data in 2006 and 2016, accounting for a ratio of 1.96:1. Given that RPUs also enroll higher numbers of transfer-in students, as well as a significant number of returning (i.e., non-firsttime) students, it's possible that ratio is actually low.

**50.** Brookings analysis of IPEDS data. 63 Great Lakes RPUs reported transfer-in data in both 2007 and 2017; 11 Great Lakes flagship and R1 universities reported transfer-in data in both years.

**51.** Davis Jenkins, Alison Kadlec, and James Votruba, "The Business Case for Regional Public Universities to Strengthen Community College Transfer Pathways (with Guidance on Leading the Process)" (Washington: HCM Strategists, LLC, 2014).

**52.** See Community College Research Center, "What We Know About Transfer" (New York, 2015), citing William G. Bowen, Matthew M. Chingos, and Michael S. McPherson, *Crossing the Finish Line: Completing College at America's Public Universities* (Princeton, NJ: Princeton University Press, 2009).

**53.** Terry W. Hartle, "A New Way to Gauge Student Success Rates," *Trusteeship Magazine*, Association of Governing Boards of Universities and Colleges, July/August 2019.

**54.** Hicklin Fryar, "The Comprehensive University: How It Came to Be and What It Is Now," in Schneider and Dean, ed., *The University Next Door*.

**55.** "Introduction" and Hicklin Fryar, "The Comprehensive University: How It Came to Be and What It Is Now," in Schneider and Dean, ed., *The University Next Door*.

56. Ibid.

**57.** Brookings analysis of IPEDS data.

**58.** Anthony P. Carnevale, Ben Cheah, and Andrew R. Hanson, "The Economic Value of College Majors" (Washington: Georgetown University Center on Education and the Workforce, 2015).

59. Ibid.

#### 60. Ibid.

**61.** This paper uses the BEA GDP implicit price deflator, rather than the BLS consumer price index or the BEA personal consumption expenditures index, because most of the items adjusted for inflation in the paper are not related to household consumption, but are rather major purchases of goods and services by universities (such as research costs, faculty salaries, or physical capital expenditures) or major nontuition sources of university revenue (such as state appropriations).

There are multiple higher-education-specific price indices. Two of the best known are the Higher Education Price Index (HEPI) and the Higher Education Cost Adjustment (HECA). Both have come under various levels of scrutiny. HEPI has been criticized for being privately created by the asset management firm Commonfund, as well as for being self-referential because it relies heavily on average faculty salaries. HECA, on the other hand, relies on two federal government indices: 75% of HECA is the Employment Cost Index, used for personnel costs, and 25% is the GDP Implicit Price Deflator, used for nonpersonnel costs. This, too, has come under criticism for being self-referential, with critics saying relying on employment costs encourages universities to spend more on high-cost faculty and staff to increase their personnel costs. For more information on these measures, and the debate about using them, see Rick Seltzer, "How to Count Higher Ed Costs," *Inside Higher Ed*, June 28, 2016.

**62.** Andy Carlson, "State higher Education Finance Case Study: Fiscal Challenges in Illinois" (Boulder, Colo.: State Higher Education Executive Officers, 2019).

- 63. Ibid.
- 64. Ibid.

65. McClure, "Institutions of Opportunity."

**66.** In FY 2011, the average Great Lakes RPU received \$1,239 in federal nonoperating grants (mostly Pell Grants) per student. By FY 2018, that number had fallen to \$999 per student. For more information on Pell Grant trends, see Cassandria Dortch, "Federal Pell Grant Program of the Higher Education Act: Primer" (Washington: Congressional Research Service, 2018).

**67.** For an overview of the metrics frequently included in performance funding, see MacGregor Obergfell, "Performance Based Funding Is Here to Stay," *New America EdCentral*, June 21, 2018.

**68.** Brookings analysis of IPEDS data. Twelve of Ohio's 14 regional public universities reported finance date from 2006 to 2017, with Miami University-Hamilton and Miami University-Middletown being the exceptions. In FY 2006, Ohio provided \$3,967 of appropriations for every enrollment, while in FY 2018 that number had fallen to \$3,622 per enrollment. Numbers are in real 2012 dollars.

**69.** David E. Chatfield, The Impact of Performance-Based Funding Models among

Ohio's Universities." Ph.D. dissertation, University of Toledo, 2017.

70. Orphan, "Public Purpose Under Pressure."

**71.** David J. Deming and Christopher R. Walters, "The Impact of State Budget Cuts on U.S. Postsecondary Attainment" (Cambridge, Mass.: National Bureau of Economic Research, 2018).

72. Orphan, "Public Purpose Under Pressure."

**73.** Brookings analysis of IPEDS data. 65 Great Lakes RPUs reported finance data every year from 2006 to 2017.

**74.** Marvin A. Titus, Adriana Vamosiu, and Kevin R. McClure, "Are Public Master's Institutions Cost Efficient? A Stochastic Frontier and Spatial Analysis," *Research in Higher Education*, 58 (5) (2017): 469-496; see also Taylor and Cantwell, *Unequal Higher Education*.

**75.** See <u>https://surveys.nces.</u> <u>ed.gov/ipeds/VisInstructions.</u> <u>aspx?survey=5&id=30085&show=all and https://</u> <u>surveys.nces.ed.gov/ipeds/VisInstructions.</u> <u>aspx?survey=5&id=30085&show=all#chunk\_1271.</u>

**76.** Orphan, "Public Purpose Under Pressure;" see also Robert Kelchen and Luke J. Stedrak, "Does Performance-Based Funding Affect Colleges' Financial Priorities?" *Journal of Education Finance* 41 (3) (2016): 302-321.

**77.** This point was raised by university administrators at the Brookings roundtable event, "Advancing Great Lakes Regional Public Universities."

**78.** Elizabeth McNichol, "Out of Balance: Cuts in Services Have Been States' Primary Response to Budget Gaps, Harming the Nation's Economy" (Washington: Center on Budget and Policy Priorities, 2012); see also Catherine Rampell, "States and cities should brace themselves for a downward spiral," *The Washington Post*, March 26, 2020.

**79.** Brookings analysis of IPEDS and BEA data; see also Michael Mitchell, Michael Leachman, and Matt Saen, "State Higher Education Funding Cuts Have Pushed Costs to Students, Worsened Inequality" (Washington: Center on Budget and Policy Priorities, 2019).

**80.** Genevieve K. Croft, "The U.S. Land-Grant University System: An Overview" (Washington: Congressional Research Service, 2019).

**81.** "FY 2019 Tribal Endowment Letter," National Institute of Food and Agriculture, <u>https://nifa.</u> <u>usda.gov/program/tribal-college-endowment-</u> <u>program</u>; for a broader look at how regional public universities think about their "stewardshipof-place" missions, see American Association of State Colleges and Universities, "Stepping Forward as Stewards of Place."

82. Brookings analysis of IPEDS data.

83. Brookings analysis of IPEDS data.

**84.** Lauren Gambino, "Silicon Valley Democrat Channel Lincoln for Tech-to-Trump-Country Bill," *The Guardian*, November 11, 2018.

**85.** Soo, "Envisioning A Regional Role," and Orphan and McClure, "Rural Anchor Institutions."

**86.** For more info on advanced industries, see Mark Muro and others, "America's Advanced Industries: What They Are, Where They Are, and Why They Matter" (Washington: Brookings Institution, 2015); for an example of how government investment in R&D can drive economic growth, see "Robert D. Atkinson, "Why Federal R&D Policy Needs to Prioritize Productivity to Drive Growth and Reduce the Debt-to-GDP Ratio" (Washington: Information Technology and Innovation Foundation, 2019).

**87.** Steve Dubb, "Linking Colleges to Communities: Engaging the University for Community Development," (College Park, Md.: The Democracy Collaborative, 2007).

**88.** See <u>https://www.nsf.gov/funding/pgm\_summ.</u> jsp?pims\_id=503214.

89. https://iin.uillinois.edu/about\_us.

**90.** See <u>https://iin.uillinois.edu/iin\_hub\_concepts</u>.

**91.** For more information on extension services in the land-grant program, see Croft, "The U.S. Land-Grant University System."

**92.** <u>https://www.regionalfitnesscenter.com/about-us</u>.

**93.** Andrew Minegar, "Spectrum Health moves into GVSU building for potential overflow of non-COVID-19 patients," WWMT Western Michigan, March 26, 2020.

**94.** "SVSU teams with Saginaw distillery on plan to produce hand sanitizer in response to COVID-19," *Saginaw Valley State University Newsroom*, March 27, 2020; see also Dan Hurley, "Michigan's public universities serving public mission during crisis," *Bridge Magazine*, April 11, 2020.

**95.** See Robert Maxim and Mark Muro, "Ideas for Pennsylvania Innovation: Examining efforts by competitor states and national leaders" (Washington: Brookings Institution, 2019).

**96.** Bruce Katz and Julie Wagner, "The Rise of Innovation Districts: A New Geography of Innovation in America" (Washington: Brookings Institution, 2014).

**97.** Neil Kleiman, Liza Getsinger, and Nancy Pindus, "Striking a (local) grand bargain: How cities and anchor institutions can work together to drive growth and prosperity" New York and Washington: New York University and Urban Institute, 2015).

**98.** Charlotte West, "Congratulations! You got into college without even applying." *The Washington Post*, March 14, 2020.

**99.** Association of Public and Land-grant Universities, "Advancing University-Engaged Economic and Social Prosperity: A Policy Position Paper by APLU's Council on Engagement and Outreach (CEO) and Commission on Innovation, Competitiveness and Economic Prosperity (CICEP)" (Washington: 2018).

**100.** Benjamin Schmidt, "The Humanities Are in Crisis," *The Atlantic*, August 23, 2018.

101. Ibid.

**102.** Devi Shastri and Alan Hovorka, "UW-Stevens Point backs away from controversial plan to cut several liberal arts majors," *Milwaukee Journal-Sentinel*, April 10, 2019.

**103.** David Deming, "In the Salary Race, Engineers Sprint but English Majors Endure," *The*  *New York Times*, September 20, 2019; see also Joseph E. Aoun, Robot-Proof: Higher Education in the Age of Artificial Intelligence (Cambridge, Mass.: MIT Press, 2017).

**104.** Deming, "In the Salary Race, Engineers Sprint but English Majors Endure."

**105.** Orphan and McClure, "Rural Anchor Institutions."

**106.** Mark Schneider and Matthew Sigelman, "Saving the Liberal Arts: Making the Bachelor's Degree a Better Path to Labor Market Success" (Washington: American Enterprise Institute and Burning Glass Technologies, 2018); see also Mark Muro and others, "Digitalization and the American Workforce" (Washington, Brookings Institution, 2017).

**107.** Schneider and Siegelman, "Saving the Liberal Arts."

**108.** Personal communication from Cecilia Orphan, assistant professor, Morgridge College of Education, University of Denver, April 15, 2020; see also <u>https://class.csuohio.edu/classedge/</u> <u>classtransferableskills</u>.

**109.** See <u>https://www.historians.org/teaching-</u> and-learning/tuning-the-history-discipline/abouttuning.

**110.** Association of Public & Land-Grant Universities, "Ready for Jobs, Careers, and a Lifetime: Public Research Universities and Credentials that Count" (Washington: 2017).

**111.** Association of Public & Land-Grant Universities, "Ready for Jobs, Careers, and a Lifetime."

112. Ibid.

**113.** Kathryn Anne Edwards and Alexander Hertel-Fernandez, "Paving the Way through Paid Internships: A Proposal to Expand Educational and Economic Opportunities for Low-Income College Students" (Washington: Economic Policy Institute and New York: D mos, 2010).

**114.** Edwards and Hertel-Fernandez, "Paving the Way through Paid Internships."

115. Ibid.

#### 116. Ibid.

**117.** Kery Murakami, "Anxious Wait for Stimulus Money," *Inside Higher Ed*, April 7, 2020.

**118.** Madeline St. Amour, "Federal Funding Left Out Some of the Most Vulnerable," *Inside Higher Ed*, April 23, 2020.

**119.** Michael Itzkowitz, "New Data Counts More Students, But Still Doesn't Count Them All," Third Way, October 12, 2017.

**120.** See Andrew Kreighbaum, "Push for 'Unit Records' Revived," *Inside Higher Ed*, May 16, 2017; see also Clare McCann and Amy Laitinen, "College Blackout: How the Higher Education Lobby Fought to Keep Students in the Dark" (Washington: New America, 2014).

121. McCann and Laitinen, "College Blackout."

**122.** McCann and Laitinen, "College Blackout," and Hartle, "A New Way to Gauge Student Success Rates."

123. McCann and Laitinen, "College Blackout."

**124.** Hartle, "A New Way to Gauge Student Success Rates."

**125.** A Brookings analysis found that at least 312 regional public universities participate in SAM, including at least 57 Great Lakes RPUs. The complete list of schools participating in SAM is available at: <u>https://www.studentachievementmeasure.org/participants</u>.

**126.** "Push for 'Unit Records' Revived," *Inside Higher Ed*, May 16, 2017. The College Transparency Act was originally introduced as S.1121 and H.R. 2434 in the 115th Congress. It was reintroduced as S.800 and H.R. 1766 in the 116th Congress.

127. Ibid.

**128.** See H.R. 4674 - College Affordability Act, <u>https://www.congress.gov/bill/116th-congress/</u> <u>house-bill/4674/all-actions</u>.

**129.** See <u>https://www.ibhe.org/iheis.html</u>.

**130.** See <u>https://www.wiche.edu/</u> longitudinalDataExchange. The Metropolitan Policy Program at Brookings would like to thank the Joyce Foundation for its generous support of this report, and Sameer Gadkaree for his partnership throughout this project.

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