Florida constituents voted to approve Amendment 2 on November 3, 2020, which will increase the state minimum wage to $10.00 per hour from $8.65 come September 2021. Every September following, the minimum wage will incrementally increase by $1.00 per hour until 2026 when the wage reaches $15.00 per hour. AERG will be conducting an economic evaluation that considers the dynamic impacts caused by the new legislation to understand the potential impacts on employment and state-subsidized programs.

Methodology

Our approach will begin with an evaluation of prior literature sources that have estimated a variety of wage elasticities on employment. The aggregation of these estimates will be used to synthesize a low, medium, and high range of wage elasticities that will be appropriate for Florida. Common estimates range from -0.09 to -0.22 which will be the low and high threshold values and the midway point of -0.16 will be the median.

Practically speaking, a 10% increase in the minimum wage would be associated with a decrease in employment by either 0.9%, 1.6%, or 2.2%.

Following our evaluation of employment, we isolate wage demographics within Florida’s population to identify those most impacted by the new legislation. Integrated Public Microdata Series (IPUMS) data provides key information at the state level to identify workers who, as of 2019, make less than $15 an hour.
Effects of Raising the Minimum Wage on Employment & Public Benefits

Figure 1 illustrates the percentage of Floridians within key wage brackets, about 35% of the Florida workers make less than $15 per hour – the largest bracket of workers earning within the $10 to $15 per hour range.

![Wage Distribution of Florida Workers](source)

Subsequently, we consider the loss of public benefits and establish eligibility criteria for Federal and State public assistance programs that focus on health care, nutrition, housing, and child-care subsidies to examine the effects of benefits cliffs.

Ultimately, we look at a case study to consider the trade-offs associated with changes to a family’s net financial resources such as reduction of hours, distorted incentives for career advancement, and loss of employment – this highlights the magnitude of the impact of the benefits cliff as the minimum wage increases.

Results

Our estimates indicate that the number of jobs in the Florida labor market will decrease by about 114,000 to 285,000 from September 2021 till September 2026, per our wage elasticity levels. As many as 1.7% to 5.6% of Florida households may be impacted by the effects of a benefits cliff following the wage increase. Our estimates examine those within the poverty level brackets of varying cutoff points for the respective public assistance programs analyzed throughout the report.
Executive Summary

Benefits of Expanding Broadband Access

As of 2020, 464,000 Floridians do not have access to an internet connection at the high-speed baseline set by the Federal Communications Commission (FCC). The FCC is working to close this gap via the Rural Digital Opportunity Fund, a $191 million grant dedicated to the expansion of broadband infrastructure in the state of Florida. With an emphasis on education outcomes and the effect that improved outcomes have on net lifetime earnings, we are attempting to forecast the benefits of increasing the availability of broadband access.

The Digital Divide

The term “digital divide” is a term that highlights the inequities between individuals and households that have access to modern computer technologies and high-speed internet and those who do not. This lack of access results in educational, economic, and social disadvantages for those who are unconnected.

Methodology

To provide a comprehensive analysis, we use regression analysis and measurements of broadband usage at the county level to evaluate the impact that broadband internet access has on education outcomes across the state of Florida, while controlling for demographic factors like population size and income. We then use an out-of-sample forecast to determine how expanded broadband access increases lifetime earnings per county.

We use OLS regression to determine the effects of broadband internet access on specific education outcomes, specifically, the composite ACT and SAT scores of 12th grade students and the number of associate degree and bachelor’s degree holders. We then used the estimated effect of broadband utilization on each education outcome and the projected increase in broadband access to predict improvements in scores and educational attainment. Next, we used the estimated increase in associate degree and bachelor’s degree holders to predict the difference in total net lifetime earnings per county, compared to individuals who only obtain a high school degree.
Summary of findings

On average, the projected increase in broadband utilization will increase ACT scores by 0.46 points

On average, the projected increase in broadband utilization will increase SAT scores by 20 points

On average, the projected increase in broadband utilization will increase the number of Associate's Degree holders by 8.54%

On average, the projected increase in broadband utilization will increase the number of Bachelor's Degree holders by 10.99%

Per county, the average total net lifetime earnings of Associate’s Degree holders are $983,556,839.55 higher than the net lifetime earnings of high school degree holders

Per county, the average total net lifetime earnings of Bachelor's Degree holders are $2,884,695,682.31 higher than the net lifetime earnings of high school degree holders

Recommendations for Action

We believe that broadband expansion is a catalyst that leads towards better education outcomes and, because of that, increases lifetime earnings. With 74,000 Floridians still left to be connect, other programs are needed to help bridge the divide. Programs that are currently in place to help expand broadband access are:

1. The Emergency Connectivity Fund
2. The USDA rural eConnectivity program
3. Emergency Broadband Benefit

These initiatives encourage closing the digital divide by providing equal access to high-speed internet.
Brownfields:
According to the Florida DEP, brownfields are “properties (where), the expansion, redevelopment, or reuse .. of which may be complicated by... a hazardous substance, pollutant, or contaminant”; examples of brownfields could be an abandoned gas station or a derelict strip mall. In 1997, the Florida Legislature established the Brownfield Redevelopment Act to incentivize private businesses and individuals to redevelop brownfields by granting special tax refunds and liability coverage. Since its inception, 417 locations have utilized the program with approximately $12.5 million in tax credits awarded to brownfield program sites in 2019-2020, with an even greater $27.5 million slated for the following year. In this report, AERG analyzes the broader environmental and economic impacts of brownfield redevelopment.

Methodology:
Since the environmental benefits of brownfield cleanups are not traded on the open market, we examine shifts in property values near redeveloped brownfields to approximate the value of the clean-ups themselves. Given the supply inelasticity for land, urban economic theory suggests changes in demand for a location due to pollution reduction will be captured in property values. Our hedonic approach to estimating the value of brownfield redevelopment is well established in the academic literature. The design of our approach combines effects from both environmental clean-up and economic development into a single estimate.
Data and Results:
AERG utilizes multiple government databases to conduct the hedonic regression method. To quantify local property values and control for property specific factors, AERG will use Florida Department of Revenue data on property values and characteristics from 1995 to 2019. We combine the FDOR property data with brownfield and census block group geodata from the Florida Department of Environmental Protection (FDEP) and U.S. Census Bureau, respectively.

Between 2000 and 2019, we estimate that brownfield redevelopments increased the value of nearby property by approximately $667 million across 46 counties. On average, residential property values in the immediate area increased by about $27,075, while commercial and industrial property values increased by about $143,920, on average. At current property tax rates, this generates $6.3 million in additional revenue for local governments and the state of Florida.

Recommendation:
Based on our statistical analysis of 121 brownfield sites in the state, we estimate with 99% statistical confidence that remediations increased single family residential property values within the same block group of the brownfield sites by approximately 11.5-12.5% on average within the state. At the median residential property value of $162,782, this is an increase of $20,387. This impact is reaffirmed when checking for sensitivity via a placebo test.

Additionally, we estimate an increase in industrial and commercial property values by approximately 11.6-18.8% on average within the state due to brownfields. However, a sensitivity analysis via a placebo test sheds some doubt on the accuracy of our specification. Therefore, we cannot conclude that our estimated impacts of brownfield remediations on commercial and industrial properties are accurate.

Based on these property value and tax revenue estimates, we are reasonably certain that brownfield redevelopments have statistically significant and positive effects on residential properties. Therefore, we advise that the program focuses on these areas until the results become more clear for commercial and industrial areas.
Executive Summary

Higher Education and Socioeconomic Mobility in Florida

In January 2019, Governor DeSantis issued Executive Order 19-31 to move Florida’s workforce education from 24th to 1st in the nation and ensure that students are prepared for the dynamic labor market. This initiative requires two million working age Floridians to achieve a short-term credential, far greater than the current enrollment of 700,000 students in the Florida College System. In order to achieve this goal, the state must increase attendance of the demographic comprising the smallest fraction of post-secondary attainment achievers: low-income students. Recent trends have shown increases in post-secondary attainment of low-income students at for-profit and two-year colleges. To advance this trend, we use the foundations set by the Department of Education’s College Scorecard and Opportunity Insight’s Mobility Report Card to create an economic mobility scorecard specifically tailored to the needs of certificate and associates degree programs in the Florida College System. This scorecard is a data-driven tool measuring how well colleges help students from low-income backgrounds transition from one income bracket to another. We likewise investigated how educational outreach programs help increase collegiate access to impoverished students. This portion of our research focused specifically on the Broward Unlimited Potential (Broward UP) program.

Developing an Socioeconomic Mobility Measure of Success

We built our scorecard using individualized and track-level data on income, demographics, and neighborhood characteristics from the Florida Department of Education, Broward College, Broward UP, and the Opportunity Atlas. Given data limitations accessing individualized information on students at all 28 colleges, we tested our model on Broward College, and its sister outreach program Broward UP. Compared to the statewide income distribution, the Broward College and Broward UP student come from a much lower socioeconomic backgrounds. The incomes for both students and parents for these institutions are almost half of the statewide incomes at each percentile. Therefore, in order to receive a high

<table>
<thead>
<tr>
<th>Mobility</th>
<th>=</th>
<th>Access</th>
<th>x</th>
<th>Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>$P\ (\text{Start in }30^{th}\ \text{percentile} &amp; \text{ends in the top }50^{th}\ \text{percentile})$</td>
<td>$=$</td>
<td>$P\ (\text{Start in }30^{th}\ \text{percentile})$</td>
<td>$x$</td>
<td>$P\ (\text{Ends above }50^{th}\ \text{percentile} \mid \text{Start in }30^{th}\ \text{percentile})$</td>
</tr>
</tbody>
</table>

![Income distribution graph]

Individual / Student Incomes

Parent / Household Incomes

Broward College

Broward Up

Florida
mobility score, a large portion of these students would need to come from the bottom 30th percentile and have projected incomes high above these starting levels.

With our data, we assigned students to income brackets based on their dependency status, initial student and parental incomes entering college, and their expected earnings post-graduation. Then, we calculated the mobility score: the product of access, the probability a student entered college in the bottom 30th percentile on the income distribution, and success, the probability a student’s earnings are in the top 50th percentile given the were a low-access student. Due to the fact institutions may have varying availability to access, our scorecard is versatile in its ability to work with large variations of data. For colleges facing high limitations in incomes data, we test the correlations between demographic and neighborhood characteristics—such as Pell Grant eligibility, ethnicity, and teen birth rates—to our low-access variable. The variable with the highest correlations are then used as a proxy for access.

For colleges with more advance earnings data or tax-data accessibility, we also provide detailed methods on how this information can be integrated into the scorecard.

### Socioeconomic Mobility Scores within the Florida State College System

We tested the Florida College System Economic Mobility Scorecard on Broward College. Given our own data limitations, we could not apply it to all 28. The scores of Broward College were high above our baseline benchmarks. Its access score was more than double the national the share of impoverished students at public two-year colleges. Likewise, the success score was more than 10 percentage points higher than our expected success outcomes. Therefore, the mobility score was far above our baseline, moderate performance mobility score of 24%. When applying our scorecard to the Broward UP, we found similar results for the Broward UP participants. These students achieved higher access and success scores than their low-access peers who did not participate.

<table>
<thead>
<tr>
<th>Broward College Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access Score</strong></td>
</tr>
<tr>
<td><strong>Success Score</strong></td>
</tr>
<tr>
<td><strong>Mobility Score</strong></td>
</tr>
</tbody>
</table>

### Recommended Improvements to Current Programs

Given the success of Broward UP, we recommend that other collegiate institutions invest in programs like Broward UP that identify the low-income areas within their locale and partner with local outreach groups to bring educational opportunities where these students live. This will greatly increase accessibility levels and thus promote higher economic mobility scores. Likewise, statewide initiatives already in place by the Department of Education to encourage localized apprenticeships, certifications, and associate and applied degree attainment may want to specifically allocate resources and time to support programs like Broward UP.

To produce a more robust socioeconomic mobility scorecard, we encourage institutions to incorporate their own individualized data into our model. The bulk of our student-level demographic and socioeconomic information specifically relates to students enrolled in Broward College and the Broward UP program. Therefore, a larger sample of data from other state colleges would more accurately encapsulate the population and enable our scorecard to provide feedback specific to the needs of every institution in the Florida State College System.
The Impact of a Medical Respite Care Center in Leon County

Executive Summary

Medical Respite Care in Leon County

Connecting Everyone with Second Chances (CESC) is a 501(c)(3) non-profit organization with the goal to offer help and hope by creating solutions that provide a pathway to self-sufficiency to people who are experiencing poverty. CESC contacted the Applied Economic Research Group (AERG) to investigate the impact of building and operating a medical respite care center in Tallahassee, FL, to serve the Leon County at-risk population. CESC also suggested that Applied Economic Research Group (AERG) determine the best medical respite care center model that would also be the most cost-effective model.

Medical respite care provides medical services and care for individuals experiencing homelessness for acute and post-acute hospitalization. Unhoused individuals tend to be routinely discharged from hospitals without having proper arrangements for further housing and medical care for their post-hospital care needs. This lack of reliable post-hospitalization care can lead to a significant strain on local Leon County health care resources due to frequent hospital readmission as a result of an incomplete recovery. Adding a medical respite care program to Leon County could provide a setting for patients to recover and receive care in a secure environment while also reducing the overall financial and resource burden on local health care.

Why a Medical Respite Care Center in Leon County?

As of 2019, the Tallahassee Metropolitan area had a total population of 386,454 and a homeless population of 951. This data translates to a 0.246% homeless rate. With an overall population of 21,733,312 and a homeless population of 27,679 in 2019, Florida has a homeless rate of 0.127%. These percentages alone indicate that the Tallahassee Metropolitan area has a homeless rate nearly double the size of Florida’s homeless rate. This result showcases that Leon County would be a fitting location for a medical respite care center to serve this large at-risk population.

Cost-Benefit Analysis Methodology

To conduct a cost-benefit analysis, the costs and benefits of introducing and operating a medical respite care center in Leon County must be considered. The costs and benefits would be as follows:

<table>
<thead>
<tr>
<th>Costs</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Operating Expenses</td>
<td>Reduced Readmission Rates</td>
</tr>
<tr>
<td>Construction or Renovating Costs</td>
<td>Reduced Spending by Hospitals</td>
</tr>
<tr>
<td>Hospital Treatment and Resource Costs</td>
<td>Improved Quality of Life</td>
</tr>
</tbody>
</table>
mobility score, a large portion of these students would need to come from the bottom 30th percentile and have projected incomes high above these starting levels.

With our data, we assigned students to income brackets based on their dependency status, initial student and parental incomes entering college, and their expected earnings post-graduation. Then, we calculated the mobility score: the product of access, the probability a student entered college in the bottom 30th percentile on the income distribution, and success, the probability a student’s earnings are in the top 50th percentile given they were a low-access student. Due to the fact institutions may have varying availability to access, our scorecard is versatile in its ability to work with large variations of data. For colleges facing high limitations in incomes data, we test the correlations between demographic and neighborhood characteristics—such as Pell Grant eligibility, ethnicity, and teen birth rates—to our low-access variable. The variable with the highest correlations are then used as a proxy for access.

For colleges with more advance earnings data or tax-data accessibility, we also provide detailed methods on how this information can be integrated into the scorecard.

### Socioeconomic Mobility Scores within the Florida State College System

We tested the Florida College System Economic Mobility Scorecard on Broward College. Given our own data limitations, we could not apply it to all 28. The scores of Broward College were high above our baseline benchmarks. Its access score was more than double the national the share of impoverished students at public two-year colleges. Likewise, the success score was more than 10 percentage points higher than our expected success outcomes. Therefore, the mobility score was far above our baseline, moderate performance mobility score of 24%. When applying our scorecard to the Broward UP, we found similar results for the Broward UP participants. These students achieved higher access and success scores than their low-access peers who did not participate.

<table>
<thead>
<tr>
<th>Broward College Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Score</td>
</tr>
<tr>
<td>Success Score</td>
</tr>
<tr>
<td>Mobility Score</td>
</tr>
</tbody>
</table>

### Recommended Improvements to Current Programs

Given the success of Broward UP, we recommend that other collegiate institutions invest in programs like Broward UP that identify the low-income areas within their locale and partner with local outreach groups to bring educational opportunities where these students live. This will greatly increase accessibility levels and thus promote higher economic mobility scores. Likewise, statewide initiatives already in place by the Department of Education to encourage localized apprenticeships, certifications, and associate and applied degree attainment may want to specifically allocate resources and time to support programs like Broward UP.

To produce a more robust socioeconomic mobility scorecard, we encourage institutions to incorporate their own individualized data into our model. The bulk of our student-level demographic and socioeconomic information specifically relates to students enrolled in Broward College and the Broward UP program. Therefore, a larger sample of data from other state colleges would more accurately encapsulate the population and enable our scorecard to provide feedback specific to the needs of every institution in the Florida State College System.
EXECUTIVE SUMMARY

Background

Due to the recent increase in remote work across the country resulting from the Covid-19 pandemic, the Florida Department of Economic Opportunity requested an analysis of the economic and fiscal effects of remote workers on various aspects of the Florida economy. The three key areas of interest in the analysis include: the economic impact of remote workers on Florida’s industries, the economic impact on the labor force within the state, and the fiscal effects on the local governments. An additional area of research that was requested was conducting a study of which Florida counties should try to attract remote workers into relocating to their region through some form of remote worker incentive program or campaign.

Impact on Florida’s Industries

Industries that were more capable of transitioning to remote work were predicted to have little to no decrease in productivity, while those that have job functions that cannot be done remotely experienced large decreases in productivity. Each additional remote worker that relocates to Florida is predicted to spend about $31,850 annually towards various service industries and about $15,990 in the durable and non-durable goods industries each year. Additionally, the total estimated direct effect that remote workers relocating to the state are predicted to have on Florida’s industries from additional consumer spending is between $201 million and $602 million dollars annually. Remote workers are also predicted to contribute about $174 million dollars more in productivity for Florida’s industries compared to non-remote workers.

Impact on Florida’s Labor Force

The impact analysis of remote workers on the labor force examined two major areas of concern: changes in productivity and changes in income. Using information on daily travel times and average weekly income we were able to determine the cost of commuting to work for non-remote employees to understand the differences in productive time at work. Remote workers were estimated to save between $351.79 and $479.34 per month and about 50 minutes of commuting time per day. An additional insight was that remote workers earn significantly higher wages than non-remote workers, on average earning about $13,250 more per year.
Fiscal Effects on Local Governments

To determine the impact of remote work on local governments, Florida’s counties were categorized into three groups and the net benefits were estimated using the change in population attributed to remote workers relocating. To calculate the net benefit, the difference was taken between county revenues and expenditures categories that would likely be impacted by population change. A linear regression model was constructed using population as an explanatory variable and net benefit as a dependent variable. This helped estimate the fiscal effect of changes population due to remote work relocation on total net benefits. For “top counties” with populations greater than 500,000 residents: holding other things fixed, when county level population increases by one additional resident, local government revenues are predicted to increase by about $4,880, expenditures are predicted to increase by about $2,779, and total net benefits for the county is predicted to increase by $2,101.

Which Florida counties should implement a remote worker incentive program:

The three key county characteristics identified to incentivize remote workers to relocate include having a nearby metropolitan area close to the beach with high-speed internet, a cost of living lower than the national average, and the need for population or labor force growth. Many remote workers that currently reside within Florida are located within counties that border either the Atlantic Ocean or the Gulf of Mexico and where more than 90% of the county has high speed internet coverage of at least 100 megabits per second. Additionally, counties that demonstrate a need for population or labor force growth should be the ones to consider implementing a remote worker incentive program as a catalyst to achieve that desired growth.

Conclusions & Recommendations

The main findings of the economic impact analysis regarding remote workers in the state of Florida is that each additional remote worker that relocates is estimated to contribute about $47,840 per year in additional revenue to Florida’s industries through personal consumption expenditures. The estimated economic impact on the labor force is predicted to be $5,560 annually in net benefits for each additional remote worker. The fiscal effects of each additional remote worker on the local governments of counties with populations greater than 500k is estimated to result in a $4,880 increase in revenues and a $2,779 increase in expenditures. On average, the total net benefit of each additional remote worker to a county is predicted to be about $2,101 per year. Florida counties which are in a MSA w/ high speed internet access near a beach, have a lower cost of living than the national average, and have a need for population or labor force growth should possibly consider implementing a remote worker relocation incentive program to attract new residents depending on their own cost-benefit considerations.