



Voinovich School of Leadership and Public Service

THE APPALACHIAN OVRDC REMOTE WORKING READINESS ECONOMIC DEVELOPMENT  
OPPORTUNITY

FINAL REPORT

December 2021

Primary Author: Brent Lane, Executive in Residence

Voinovich School of Leadership and Public Service

Ohio University

[Brent.Lane@ohio.edu](mailto:Brent.Lane@ohio.edu)

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## Summary

In 2021, staff of the Ohio University Voinovich School of Leadership and Public Service undertook an applied research project to provide information on remote working support and attraction factors, as well as potential economic benefit, to guide ongoing discussions and future decisions by Ohio Valley regional public policy leadership. The research was directed by Brent Lane, Executive in Residence with the Voinovich School of Leadership and Public Service, with the support of other Ohio University scholars, staff, and students. The project was completed in December 2021.

The study found the remote working necessitated by the COVID pandemic has accelerated pre-existing trends and revealed market preferences that create opportunities for non-metro communities to both retain and attract remote workers, especially young professionals and working family demographic segments, with preferences for smaller communities but whose relocation had been previously thwarted by limited local employment opportunities. The broader use and acceptance of remote working established during the pandemic is expected to reduce this limitation, especially for communities that are well prepared to support the infrastructure, services, and other needs/preferences of distance workers.

While remote working was found to offer economic opportunities, particularly for non-metro areas, the study found that the high-profile city and state programs that have driven and framed many remote working discussions are primarily focused on incentive-based attraction strategies unlikely to yield significant economic benefits due to their limited scales. As such, even “successful” remote workers attraction incentive programs seem fated to “succeed too small” by being prohibitively expensive to expand to increase outcomes.

The study characterized several other alternative remote working strategies for rural economic development and their requisite factors that, in addition to financial incentives, would distinguish a community as “remote work-ready”. A “scorecard” assessment of remote working requirements constructed and applied to the Appalachian OVRDC region found that, while there are several areas for improvement, the region is nonetheless fairly well positioned to begin supporting and attracting remote workers – at least in some areas.

The study concluded that remote work offers significant potential economic development for the Appalachian OVRDC region by enabling current and prospective residents’ abilities to secure employment independent of an employer being locally located or requiring costly out-commuting. Therefore, remote work offers advantages both to current residents who wish to remain in the region through remote work, and to non-resident remote workers strongly desiring to relocate to the region. Rather than replicating incentive-based new resident attraction models prominently in use elsewhere, the Appalachian OVRDC region should pursue a comprehensive strategy enabling remote work by both current and prospective residents. By capitalizing on an array of remote work opportunities, such a plan would serve a broader, more diverse spectrum of the region’s citizens and families to a greater economic effect.

## **1. Introduction**

The remote working necessitated by the COVID pandemic has accelerated pre-existing trends and revealed market preferences that create opportunities for non-metro communities to retain and attract high priority residential segments. Significant young professionals and young family demographic segments have established preferences for smaller communities but have been hampered in relocating by the limited professional opportunities such locations typically afford. The broader use and acceptance of remote working established during the pandemic is expected to reduce this limitation, especially for communities that are well prepared to support the infrastructure, services, and other needs/preferences of distance workers.

The expansion of remote working thus has the potential to enable more non-metro residents to improve their employment prospects while remaining in – or perhaps moving to – the smaller towns and rural areas where they prefer to live. Encouraging remote working and remote workers may constitute a significant opportunity to enhance the economies of the Ohio River Valley Development Commission (OVRDC) region and, more importantly, the economic well-being of their citizens. However, information on remote working, at least at the scale experienced during the 2020-21 COVID pandemic, is currently limited.

### **1.1 Research Project Structure**

In 2021, staff of the Ohio University Voinovich School of Leadership and Public Service undertook an applied research project to provide information on remote working support and attraction factors, as well as potential economic benefit, to guide ongoing discussions and future decisions by the Appalachian OVRDC region's public policy leadership. The project was directed by Brent Lane, Executive in Residence with the Voinovich School of Leadership and Public Service, with the support of other Ohio University scholars, staff, and students. The project was designed to be completed in December 2021.

### **1.2 The Appalachian OVRDC Study Area**

The Ohio Valley Region Development Commission (OVRDC) twelve counties in Southern Ohio. The region is populated by approximately 670,000 residents and spans 6,022 square miles. There are 171 townships, 70 villages, 9 cities, and 14 census-designated places (CDP's). Established in 1967, OVRDC serves as a Local Development District for the Appalachian Regional Commission, an Economic Development District for the US Department of Commerce, Economic Development Administration, and a Regional Transportation Planning Organization for the Ohio Department of Transportation.

The geographic area included in this project included the eleven (out of a total of 12) of OVRDC counties that are also designated as Appalachian Regional Commission (ARC) counties (Table 1). The Appalachian OVRDC study area therefore consisted of the counties shown in Figure 1.

Table 1

Appalachian OVRDC Study Region	
Adams County	Lawrence County
Brown County	Pike County
Clermont County	Ross County
Gallia County	Scioto County
Highland County	Vinton County
Jackson County	

Figure 1



### 1.3 Methodology

The project Scope of Work focused on the identification of factors that could assess both the Appalachian OVRDC region’s current level of remote worker preparedness and aspects that need to be addressed to enhance remote working in the region. The limited academic and professional research literature on remote working was examined to identify recognized factors for the attraction and support of remote workers, especially to non-metro areas like the Appalachian OVRDC region. These factors were compiled into a “scorecard” to 1) aid assessments of the region’s current level of remote working preparedness and to 2) help community leaders identify factors that might be enhanced if the encouragement of remote working addressed community development goals.

The study methodology involved the following tasks:

1. Examination of academic, professional, and media sources to identify trends influencing remote working nationally and regionally that might affect efforts in the Appalachian OVRDC region.
2. Interpretation and synthesis of academic and professional literature that identify remote worker prerequisite and attraction factors.
3. Compilation of consensual and prioritized factors into a remote work readiness assessment “scorecard” format.
4. Application of the remote work readiness scorecard to attributes of the Appalachian OVRDC region to delineate the status (presence/absence) of key elements.
5. Assessment of the Appalachian OVRDC region’s relative sufficiency/competitiveness scorecard position.
6. Estimation of the economic impacts of the attraction of non-resident remote workers.
7. Identification and definition of other forms of economic and community development benefits potentially provided by remote working.
8. Disaggregation and characterization of prospective Appalachian OVRDC candidate remote working demographic segments.
9. Delineation of a portfolio of Appalachian OVRDC remote working economic development strategic options.

## **2. The Recent State of U.S. Remote Working**

What is meant by remote working? Many people and occupations have routinely been performed without operating from a central business location. Often self-employed people operate service business activities from their homes - consultants, artisans, tradespeople. But the advent of increasing high speed broadband internet access across multiple technology platforms has led to an expansion of the occupations that can operate remotely. This technological capability has led to not just the liberation of some employment from the conventional office setting but the creation of new forms and patterns of employment entirely independent of such settings.

### **2.1 Definition of Remote Working - “Digital Commuting”**

For the purposes of this project, not all such forms of “working from home” were considered to constitute remote working. Instead, the focus was placed on a narrower definition under which remote working refers to employment where work is fully or partly carried out, on a regular basis, at an alternative worksite other than a dedicated employer’s premises.

Even within this narrower definition there are many phrases used to refer to remote work, including: telework, e-Work, mobile work, smart working, telecommuting, flexible working, hub-work, co-working, etc. Each of these describe an employer-employee relationship in which the employee’s work is performed partly or wholly independent of the employer’s physical location. From this perspective, remote working can perhaps be best understood as the digital alternative to physical commuting to a place of employment. Such “digital commuting” activity is the form of remote work investigated in this project.

### **2.2 COVID and Remote Work**

While the term “remote working” has gained greater prominence during the COVID pandemic, the concept itself is not new. It was a form of employment that, while still practiced to a limited extent, was steadily growing. In 2019, the US Census Bureau’s American Community Survey found that since 2000, the percentage of Americans working remotely had risen from 3.3% to 5.2%. While this meant that relatively few people worked primarily from home, the U.S. Bureau of Labor Statistics’ American Time Use Survey, in 2019, also found that almost a quarter of American workers did some work at home.

Thus, even before the COVID pandemic, increasing numbers of American workers were becoming accustomed to performing some portion of their work away from their employer’s location. Concurrent with this trend, expanding (albeit uneven) broadband availability, along with more convenient interpersonal and group interaction internet platforms (Zoom, etc.), were providing more facile tele-video and data communications enabling the expansion of remote working.



These capabilities proved timely when the 2020 onset of the COVID-19 pandemic in the U.S. necessitated an acceleration of the remote working trend, introducing the concept to entire new populations and categories of employees while also increasing the share of work performed away from the employer location for those already so engaged. Information on the extent of remote working in the US economy remains limited and imprecise, but a special supplement to the US Bureau of Labor Statistics found that in May 2020, 48.7 million people, about 35% of the employed workforce, reported that they had worked from home in the prior four weeks because of COVID.

This effect intensified as the pandemic extended through 2020. Remote working began to mature from an emergency response to a broadly accepted conventional business model. A November 2020 McKinsey Global Institute analysis of 2,000 tasks over 800 job categories estimated that 29% of work in the United States could be permanently performed remotely with no productivity loss, and an additional 10% could be done remotely as needed.<sup>1</sup>

### **2.3 US Trends favoring Remote Working**

The extent to which remote working continues after the lifting of COVID pandemic restriction is unknowable in the specific but foreseeable in the general. Given how favorably many Americans now view their remote working “natural experiment” of the past many months it is inevitable that past employment conventions have changed. In particular, there are significant trends that preceded the COVID pandemic that have been reinforced and accelerated by that experience, including some that suggest remote working has the potential to benefit non-metro areas like the Appalachian OVRDC region.

- As previously noted, the concept of remote working in the US is not new and was already increasing in number and nature prior to the onset of COVID pandemic-imposed restrictions on traditional workplaces.
- The increasing pre-COVID availability of broadband internet, along with the emergence of a suite of internet business and consumer technologies for facile group meetings, videoconferencing, and file sharing, combined to quickly facilitate the pandemic imposed abrupt shift to remote working.
- The persistence of pandemic restrictions has provided for a maturation of initially impromptu remote working practices into the codification and broad adoption of remote work as conventional business and employment model.
- Both employers and employees have realized numerous economic and non-economic benefits of remote working that have shifted work/life expectations of both sides, precluding a full return to “old normal” past practices.

Numerous recent surveys of both employees and employers have attempted to forecast how and to what extent remote working will continue in the U.S. While they can differ widely in their estimates, they are consistent in concluding that remote working is an established reality for the future.

- Global Workplace Analytics believes that 25-30% of the workforce will work remotely by 2021.<sup>2</sup>
- Upwork estimates that 22% of the workforce (36.2 million Americans) will work remotely by 2025.<sup>3</sup>
- OWL Labs 2020 State of Remote Work Report found that after COVID 80% of people surveyed expected to work at least 3 days from home per week.<sup>4</sup>
- The OWL report further found that 59% of respondents said they would be more likely to choose an employer who offered remote work, and with 23% of those surveyed being willing to take a 10% pay cut to work from home permanently.<sup>5</sup>

## **2.4 Remote Working and Rural Economies**

Of particular relevance to this study are research findings indicating a popularity of remote work among certain demographic and geographic populations segments that potentially creates economic opportunities for non-metro regions. Research has found that, not only are more people preferring to work remotely from home, they also often want to change the locations of their homes to more desirable locations.

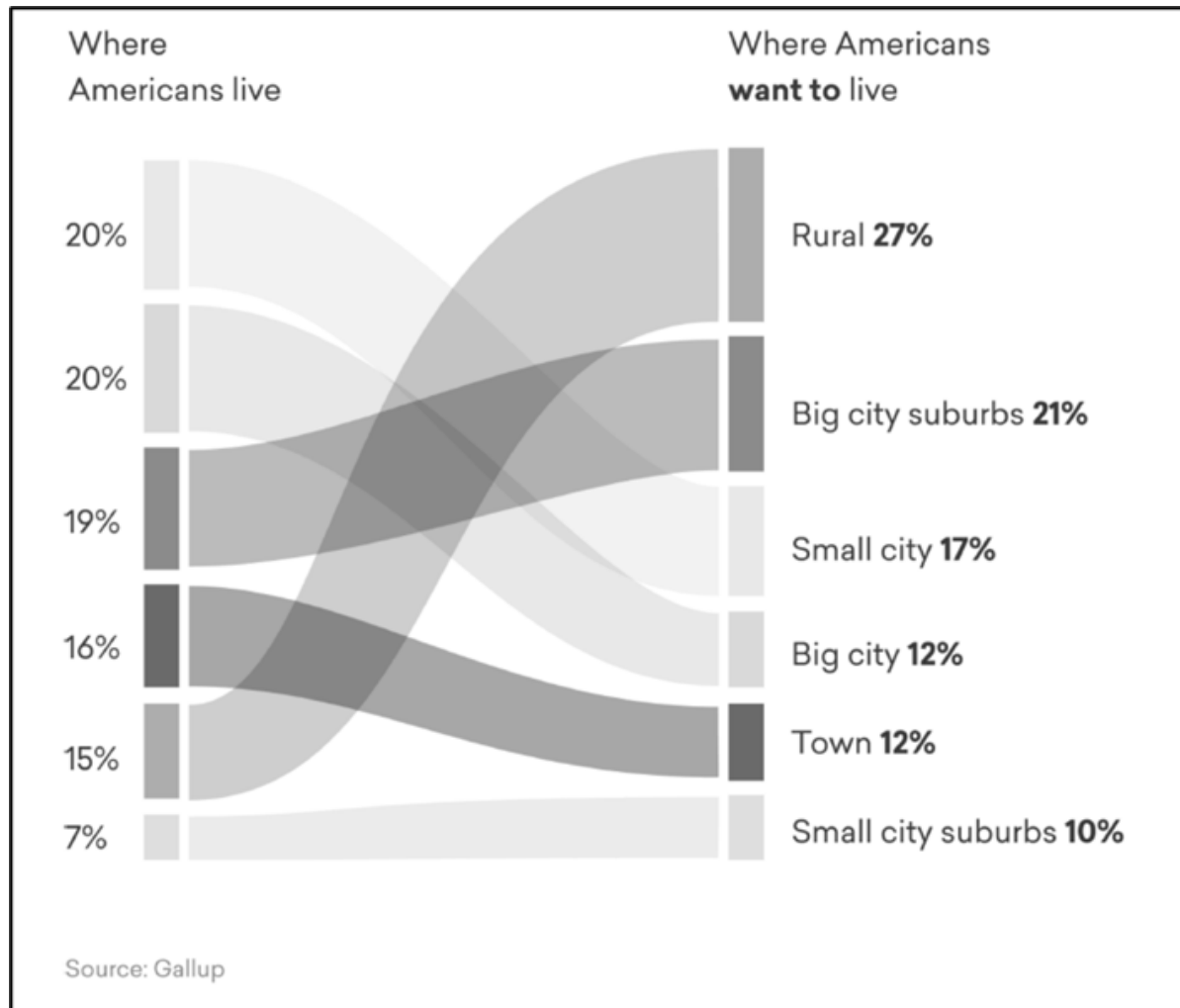
Just prior to 2020 COVID pandemic there was growing media attention to research indicating that, despite the perception created by the growth of American cities in recent decades, there was a strong, unfulfilled desire by many urbanites to live elsewhere. But the desires of many urban dwellers to relocate to smaller cities, towns and rural areas were thwarted by the necessities of employment centralization in urban areas. A December 2018 story in the Washington Post described the situation well, asking:

*“If Americans say there’s not much appeal to big-city living...why do so many of us live there?...Quite simply, big metro areas tend to be where the jobs and opportunities are.”<sup>6</sup>*

The Post article quoted was reporting on research by the survey firm Gallup, Inc. which documented a stark contrast between where Americans live and where they would prefer to live. In particular, in 2018 Gallup found that many American urban residents would like to make a move to non-metro areas. 27% of survey respondents said that a rural area would be their

ideal community and another 17% wanted to live in a town.<sup>7</sup> Thus, even before the COVID pandemic-imposed constraints on daily activities in America's big cities, some 44% of those surveyed desired to move away from big cities to areas more like the Appalachian OVRDC region. (Figure 2)

Figure 2



The reason most commonly cited in the survey for the inability to relocate was simply “cities were where the jobs are”. As the Gallup report’s author Frank Newport – perhaps prophetically – summed up the research:

“If Americans did sort themselves according to their desires, there would be an exodus from the big cities and, to a lesser degree, from small cities and town, accompanying a movement to

rural areas...Labor markets work as a positive feedback loop: Job opportunities attract talented employees, and talented employees attract firms looking to hire.”

When Gallup updated this poll in December 2020, the results suggested that the effect of the pandemic had not only reinforced these preferences, but it had also enhanced them. Gallup reported that “Nearly half of Americans (48%) at the end of 2020 said that, if able to live anywhere they wished, they would choose a town (17%) or rural area (31%) rather than a city or suburb. This is a shift from 2018, when 39% thought a town or rural area would be ideal.”<sup>8</sup>

The remote working model that is emerging in the US from the COVID pandemic has the potential to scramble the historically powerful labor/employer geographic proximity relationship in industries where remote working is feasible and mutually advantageous. Those remote workers should have increasing latitude to pursue no longer mutually exclusive goals of employment and preferred residency. Non-metro areas that satisfy the prerequisites that enable such relocations, and that proactively facilitate those relocation decisions, stand to benefit first and most.

### **3. Remote Working and Rural Economic Development**

Several high-profile city and state programs to attract remote working were launched both before and during the COVID pandemic. Some non-metro areas have also been quick to recognize and attempt to capitalize on the rural economic development potential of remote working. Many more communities, including some in the Appalachian OVRDC region, have recently begun deliberations prompted by those examples to explore rural working economic development strategy benefitting smaller cities, towns, rural areas.

#### **3.1 Remote Worker Attraction Program Examples**

This study identified and examined several such existing initiatives to see what lessons might be useful to inform and guide the Appalachian OVRDC region’s policy makers on the potential of remote working support to benefit their citizens and economies. The intent was not to provide a comprehensive inventory of all such program but to provide a representative sample illustrating the basic parameters of such initiatives. Several prominent U.S. and international examples were catalogued and are summarized in Table 2 (and are further described in Appendix 1).

Table 2

Location	Program
<b>Ireland</b>	Open 400 remote work hubs by 2021 across rural Ireland connected to the same network; this includes a mix of public facilities and partnerships with private firms such as bars and restaurants.
<b>West Virginia</b>	"Ascend West Virginia"; \$12,000 subsidy (10k over monthly payments over 2 years, and final \$2k at the end of the second year), free travel to any remote workers moving to WV countryside, free use of recreational facilities. This includes 3 towns: Morgantown, Shepherdstown, and Lewisburg.
<b>Vermont</b>	\$10k over two years towards remote workers in tech industries. Two explicit goals; 1. foster VT's tech industry, and 2. combat VT's image of being "unfriendly to new businesses"
<b>Topeka, Kansas</b>	\$15,000 for home buyers, \$10,000 for renters in incentives; this is famously one of the more generous programs, with; the goal specifically to attract high-skill workers.
<b>Baltimore, Maryland</b>	\$5k towards down payment only on fixed-mortgage loans.
<b>Maine</b>	Up to \$15,660 in tax rebates; specific consideration being given to degree holders, especially STEM majors; specifically outlined to fight the decreasing youth population in Maine.
<b>Tulsa, Oklahoma</b>	\$10,000 in cash, plus free co-working space; one of the more generous programs.
<b>Fayetteville, Arkansas</b>	\$10,000 in cash, plus a free mountain bike; particularly successful, attracting 29,000 workers from every state and countries around the world.
<b>Savannah, Georgia</b>	\$2,000 in reimbursement for moving here specifically for tech-workers, plus additional grants for job-creation.
<b>Remote Shoals, Alabama</b>	Up to \$10,000 over the first year depending on wages; requires an income of \$52k annually, likely in order to target high-skill workers.
<b>Hawaii</b>	Incentives limited to free airfare; one of the explicit goals was to repair Hawaii's tourism industry, which took a 90% hit during the pandemic.

What the majority of these programs share is a strategic premise that attracting non-local, typically metro area, remote workers to relocate would enhance the local economy, principally through the mechanism of the local spending of additional income provided through remote employment. Such "recruitment of income" strategies are entirely logical and an accepted

economic concept that should indeed eventually lead to increases in employment, income, and economic activity (output).

It is important to observe how these financial incentives change depending on the demographic a city government wants to attract. Maine, for example, has an explicitly stated goal of retaining a population of young professionals. Instead of offering lump payments of cash, they offer tax credits on student loan payments up to \$377 per month. Remote Shores, Alabama wished to specifically attract high-skill, high-income remote workers, and offers \$10,000 to workers if their income is at least \$52,000. Vermont also offers \$10,000 to new workers in categories targeted by the state government, giving special priority to remote workers in tech industries. Inherent in these targeted strategies is that the preferential attraction of some demographic categories yield higher economic impacts than others.

### **3.2 Economic Impacts of Attracting Remote Worker Income**

The economic impacts of a single additional remote working household can be calculated through the IMPLAN econometric model. IMPLAN is the most commonly used instrument for estimating impacts of economic events. As applied in economic development, the economic event for which impacts are estimated using IMPLAN are typically the attraction of an industrial facility location. But the same technique can be used to estimate impacts of new income into a regional economy from remote workers. In Table 3, those impacts have been calculated for the **addition** of a single household across varying annual household income levels.

As exhibited in the table, those economic impacts increase with the income of the remote worker household added to the Appalachian OVRDC region's population and economy. The effect of adding a \$40,000-\$50,000 income household would be the creation of an additional 0.23 jobs, nearly \$9,000 in new total income, and over \$32,000 in total new economic activity. In contrast, adding a \$190,000 to \$200,000 household would add 0.81 jobs, \$32,000 in new total income, and nearly \$116,000 in total new economic activity.

Table 3

Economic Impacts of a Remote Worker Household			
Annual Household Income Level	Employment	Labor Income	Output
\$40,000	0.23	\$8,968	\$32,227
\$50,000	0.29	\$11,210	\$40,283
\$60,000	0.31	\$12,071	\$43,915
\$70,000	0.36	\$14,083	\$51,234
\$80,000	0.4	\$16,202	\$57,114
\$90,000	0.45	\$18,227	\$64,253
\$100,000	0.5	\$20,252	\$71,393
\$110,000	0.53	\$21,243	\$74,588
\$120,000	0.58	\$23,175	\$81,369
\$130,000	0.63	\$25,106	\$88,149
\$140,000	0.67	\$27,037	\$94,930
\$150,000	0.72	\$28,968	\$101,711
\$160,000	0.68	\$27,042	\$97,655
\$170,000	0.72	\$28,732	\$103,758
\$180,000	0.76	\$30,422	\$109,862
\$190,000	0.81	\$32,112	\$115,965

### 3.3 Remote Worker Programs' Capacities Determine Economic Impacts

The experience of most of these initiatives - and there are seemingly more announced every week - is very limited in both scope and time. The majority are either only in their design or early implementation stages. This study examined several of the more established program to assess their potential economic significance, even if they succeeded in their objectives. This was done by multiplying the economic impacts calculated in Table 3 for a household in the \$100,000 level by the capacity of the program as estimated in Table 4 below.

Table 4

Program Region	Per Worker Incentive	Budget	Remote Workers Capacity
Vermont	\$10,000	\$500,000	50
Topeka, Kansas	\$15,000	\$900,000	60
Baltimore, Maryland	\$5,000	\$100,000	20
Maine	\$15,660	\$5,000,000	319
Tulsa, Oklahoma	\$10,000	\$1,000,000	100
Fayetteville, Arkansas	\$10,200	\$1,000,000	98
Savannah, Georgia	\$2,000	\$100,000	50
Remote Shoals, Alabama	\$10,000	\$100,000	10
Hawaii	\$665	\$33,250	50
West Virginia (per city)	\$14,500	\$3,000,000	207

The expected economic impacts at the \$100,000 income level were estimated and are displayed in Table 5 below. The impacts of differing state and city programs were normalized using an IMPLAN econometric Ohio context for comparative consistency. As indicated, the economic impacts vary by the amount of funding available, and the amounts of the incentives offered. For most of the programs the results of successful implementation are modest. The expected new jobs resulting from attracting remote workers ranges from single digit results in Baltimore and Remote Shoals to low- or mid-two-digit jobs total in Vermont, Topeka, Tulsa, Fayetteville, Savannah, and Hawaii. Only from the much more substantially funded programs in Maine (128) and West Virginia (139) might one expect success to yield appreciable number of jobs and other economic impacts.

Yet even in those examples such results must be placed in the context of the scale of the local and state economies in which they occur. Overall, it is highly questionable that the limited scale of most of these programs will be sufficient to yield significant economic benefits.

Table 5

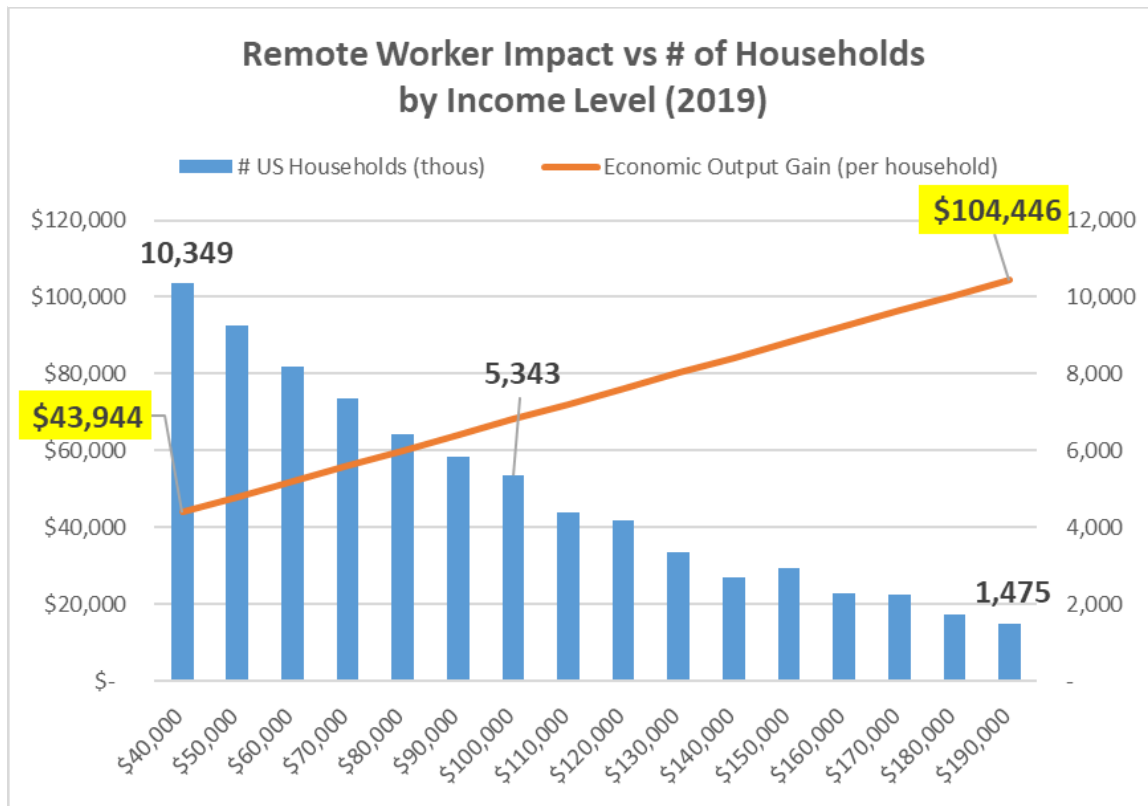
Program Region	Employment	Labor Income	Output
Vermont	11.5	\$448,392	\$1,611,340
Topeka, Kansas	18.6	\$724,264	\$2,634,873
Baltimore, Maryland	7.2	\$281,658	\$1,024,673
Maine	127.6	\$5,168,336	\$18,219,433
Tulsa, Oklahoma	45.0	\$1,822,690	\$6,425,348
Fayetteville, Arkansas	49.0	\$1,984,707	\$6,996,490
Savannah, Georgia	26.5	\$1,062,174	\$3,729,398
Remote Shoals, Alabama	5.8	\$231,747	\$813,687
Hawaii	31.5	\$1,255,296	\$4,407,470
West Virginia	138.6	\$5,593,891	\$19,640,717



Arguably this limited level of analysis may underestimate expected economic impacts, especially if the programs examined are intended to attract higher net worth households than the \$100,000 income level used in this example. It is certainly accurate to expect that if the programs attracted households in the upper range of income levels the impact would increase proportionately.

But it is worth noting the challenge inherent in this scenario as depicted in Figure 3, which shows combination the economic impact on total output and the number of U.S. households for respective income levels. There is a far smaller population of \$190,000 income households (1.5 million), from which to attract relocations, than from the \$100,000 (5.3 million) or \$40,000 (10.3 million) income segments. Focusing attraction efforts to ever higher income demographics lessens a program's probability of success by targeting a much smaller number of wealthier candidates to whom financial incentives are proportionately less influential. This reality may call into question the wisdom of designing rural economic development strategies that primarily capitalize on the potential benefits of remote working through non-local attraction strategies.

Figure 3



## **4. Remote Work Attraction/Readiness Factors**

If it is true that many prospective remote workers desire to relocate to non-metro areas, such as smaller cities, towns, and rural areas, what factors would lead them to select one location over another. This is a critical issue for those communities anticipating that attracting remote workers will contribute to the vitality of their economies. These same factors are expected to affect the extent to which communities enable the continuation and expansion of remote working by current residents. Thus, factors that determine a community's attractiveness to in-migrating remote workers also enable remote work by current residents, effectively addressing both sides of the same "remote work readiness" coin.

A primary objective of this study was to address specifically this issue by identifying location characteristics and factors that attract and support remote workers, and thereby guide Appalachian OVRDC regional officials considering this as an economic development strategy. This involved compiling academic and professional research literature on remote working as well as on related demographic subjects. These findings were synthesized in the format of a "scorecard" describing the nature (and to a lesser extent the priority) of several factors recognized as affecting location decisions of remote workers.

1. Examination of several dozen publications identified and prioritized cited factors enabling and/or attracting remote workers.
2. Many factors identified in the remote worker literature differ little from the conventional location preference factors that describe any community's relative desirability or "quality of life".
3. However, several factors were identified as distinct priorities to remote workers as prerequisites to their remote employment or as highly preferred advantages to their former, typically urban, location.

### **4.1 Remote Worker Attraction Research Literature Review**

The phenomenon of remote working is not new, but despite it having increased in significance in recent years, the subject has less attention in the academic literature than from professional literature and media. The exponential increase in remote working necessitated by the 2020-21 COVID pandemic will eventually prompt more scholarly attention in the future, but fortunately the phenomenon is already being thoroughly examined in professional and policy reporting. Such sources provided the bulk of the information compiled and analyzed in this research.

An examination of several dozen publications prioritized the findings of the most relevant and recent reports (Appendix 2) that specifically cited factors enabling and/or attracting remote workers. Particular attention was placed on more recent literature that accounted for effects or insights yielded by the 2020-21 COVID pandemic. The information collected and presented in

these reports was assimilated and analyzed to reconcile disparate terminology referencing similar issues. Significance was attributed to how often identified factors were independently cited in multiple publications as a qualitative measure of market-articulated priority.

## 4.2 Remote Worker Priority Factors

Many of the factors identified in the remote worker literature differ little from the conventional location preference factors that describe any community's relative desirability or "quality of life". Such standard metrics of the quality of life include income, employment, the environment, health, education, recreation, and safety are important to prospective remote workers just as they are to anyone considering relocation. As such they are important to recognize and address in a remote worker attraction strategy. However, this study focused on validated factors that are distinct priorities to the remote worker, either as prerequisites to their employment or as highly preferred advantages to their former, typically urban, location. Those identified include the factors described in Table 6.

Table 6

Remote Working Attraction/Readiness Scorecard	
Factor	Description
<b>1. Internet Access</b>	Accessible, affordable, and adequate internet service is an absolute prerequisite for remote workers whose bandwidth and speed requirements may exceed those of the typical residential user. For example, while the US Federal Communications Commission officially defines high-speed broadband internet as a minimum of 25 Mbps download and 3 Mbps upload, the requirements of many remote working applications, such as video conferencing, already exceed that standard. Equally important is the reliability and affordability of those services; there is a strong preference for multiple (3 or more) competing internet service providers (ISPs).
<b>2. Attainable Housing</b>	A primary motivation for many relocating remote workers is to move to areas where housing, and especially home ownership, is more attainable. A 2020 analysis by the real estate platform Zillow, found that nearly 2 million urban renters were employed in jobs that could be done remotely in markets where they could afford to buy a house. <sup>9</sup> Millennials, with an average age of 38, could be the largest first-time home buyer segment to benefit from remote working. Communities offering the combination of quality of life and affordable houses desired by this segment would be well positioned to attract such remote workers.

<b>3. Cost of Living</b>	Surveys have shown that many employees are willing to accept lower compensation in order to work remotely. Remote workers therefore often seek locations that increase the spending power of stable or even declining income.
<b>4. Remote Workspaces</b>	As remote working evolves from its largely unplanned pandemic origins to a codified employment arrangement, remote workers reliance on temporary “work from home” arrangements will shift to more structured settings. While the majority of remote working will likely continue to be home-based, an increasing share will take place in a combination of broadband capable, formal (coworking, business incubation, innovation hubs) and informal (libraries, cafes, coffeeshops) locales. Surveys indicate that collective spaces, like co-working centers, are especially important for supporting first time and early career remote workers with an interactive social environment.
<b>5. Childcare</b>	Of all the extemporary at-home working accommodations imposed on employees during COVID, childcare is the most critical factor in need of optimization to support remote working. An April 2021 report in the Harvard Business Review found that 63% of U.S. working parents had difficulty finding childcare during the pandemic. <sup>10</sup> This was a major reason that 2.3 million women left the U.S. labor force since February 2020, accounting for 80% of all discouraged workers during the pandemic. Where childcare was a problem before the pandemic, remote working did not provide a sustainable solution. Along with broadband access and attainable housing, available/affordable pre-school, daycare, and afterschool childcare constitute the essential triad enabling remote work for younger households.
<b>6. Outdoor Recreation</b>	Prospective relocating remote workers seeking non-metro locales emphasize regional outdoor recreation opportunities Recreation includes open green spaces, natural assets, parks, etc. This preference is especially influential among younger remote workers.
<b>7. Professional Educational</b>	Remote workers, particularly those early in their careers, are concerned with continued advancement in their professional trajectories. This requires access to technical training and certification, continuing education for accreditation, as well as academic and executive education. Current residents benefit from remote working-focused upskill training enabling mid-career shifts and displaced worker re-employment.

<b>8. Remote Work Training</b>	<p>The increasing prevalence and acceptance of remote work as a conventional employment model has led to the availability of hundreds of thousands of previously geographically constrained job opportunities. Moreover, the range of occupations being performed remotely as also broadened significantly. Nonetheless, many first tie workers and existing workers will desire and require workforce training and retraining to qualify for remote work positions. Moreover, training is required to optimize remote working digital skills for current and future remote workers. Areas where conventional workforce development programs have adapted to provide training and skill development specific to remote working employment will position residents in their service areas to be more competitive for such opportunities.</p>
<b>9. Travel Access</b>	<p>Remote workers preferring non-metro locations still require expeditious ground transportation or air service to major business metros. Public and private transportation options to nearby cities are desired to access medical, retail, and business services not locally available. Convenient access to an airport with direct flights to major US cities and one stop service to international destinations is a priority as well.</p>
<b>10. Financial Incentives</b>	<p>Numerous states and cities have recently begun programs offering financial incentives to attract relocating remote workers. These programs often target certain demographic or occupational categories to achieve economic development outcomes. The implementation experience of these programs is limited to date with little, if any, information as yet available on their performance.</p>

## **5. Appalachian OVRDC Remote Working Readiness “Scorecard”**

Each of these factors was incorporated and briefly described in the “scorecard” format below (Table 7). The scorecard is intended to provide a structure for examining the competitive position of the region from the perspective of relocating remote workers. While some readily evaluative aspects of the Appalachian OVRDC region’s current status are described herein, this study should be considered only an initiation of a more detailed assessment as the region’s remote working strategy continues to evolve.

### **5.1 Internet Access**

**Factor One:** Accessible, affordable, sufficient - from multiple ISPs.

Ohio is ranked 24 nationally and has 47.7% of required low price plans compared to a 51.1% average.. Low price plans are \$60 and less per month (Internet Access in Ohio: Stats & Figures, broadbandnow.com).

According to a June 2019 report by the Federal Communications Commission (FCC), 81% of U.S. census blocks households had access to three or more broadband providers.<sup>11</sup> For the Appalachian OVRDC region this percentage was essentially 100%. In the region, approximately 116,000 (18%) people do not have access to 25 Mbps broadband. This is especially true outside of Clermont County where counties such as Gallia and Vinton have broadband internet coverage of less than 50%. (Table 1)

Such internet statistics are often much disputed. Regardless of exact figures, it is reasonable to assume that current and future remote working prospects in the Appalachian OVRDC region may be discouraged by a real or perceived reduction in their quality of broadband access.

Table 7

Internet Access						
AREA	Total Population	%Coverage >25 down/3 up MBPS	# of internet providers	# internet plans	Average Plan price	No broadband (25Mbps)
Ohio	11,690,000	89%	98			
Appalachian OVRDC	697,863	75%			\$64.12	
Adams County	27,776	52%	5	4	\$69.99	13,000
Brown County	43,572	68%	4	4	\$69.99	NA
Clermont County	204,275	99%	4	10	\$60.49	1,000
Gallia County	30,088	31%	7	5	\$53.00	NA
Highland County	43,016	70%	7	10	\$67.98	NA
Jackson County	32,450	72%	7	9	\$75.99	NA
Lawrence County	60,184	87%	8	13	\$66.50	8,000
Pike County	28,000	75%	6	10	\$67.98	NA
Ross County	76,948	92%	4	7	\$75.68	NA
Scioto County	76,040	84%	3	1	\$49.99	
Vinton County	13,083	38%	5	4	\$69.99	

## 5.2 Attainable Housing

**Factor Two:** A primary motivation for many remote workers is enhancing their home ownership status, either as first-time buyers or more commodious housing.

The Appalachian OVRDC region’s housing stock includes 194,795 owner-occupied housing units with a median value of \$117,870. According to real estate site Relator.com, the median list price for homes for sale in the region was 176,042 in 2021 and had decreased slightly (12.4%) in the past year. Overall, housing costs in the region are well below that of the US, at only 39% of the national average, and have not experienced the volatility seen in other markets. (Table 8) The ability to purchase a first home is likely to be the Appalachian OVRDC region’s most compelling attraction for remote workers.

Table 8

Area	Median Listing	Median Income
United States	\$374,900	\$67,521
Ohio	\$181,756	\$56,602
Adams County	\$129,900	\$39,079
Brown County	\$172,500	\$54,575
Clermont County	\$242,500	\$66,968
Gallia County	\$153,700	\$44,858
Highland County	\$142,500	\$44,169
Jackson County	\$140,000	\$47,550
Lawrence County	\$142,500	\$45,118
Pike County	\$162,400	\$42,832
Ross County	\$174,900	\$51,092
Scioto County	\$139,900	\$41,330
Vinton County	\$179,900	\$45,673



### 5.3 Cost of Living

**Factor Three:** Remote workers often seek locations that increase the spending power of stable or even declining income.

As measured in 2020 by the U.S. Bureau of Economic Analysis (USBEA), the Appalachian OVRDC region is a relatively less expensive place to live. Overall, the cost of living in the region is 80.2% of the U.S. cost; therefore, the region will be viewed as having a favorable cost of living by most current and prospective remote work candidates. (Table 9)

Table 9

Area	Cost of Living Index	Grocery	Health	Housing	Transportation	Utilities	Child Care
United States	100	100	100	100	100	100	100
Ohio	82.6	96.1	87.4	60.9	83.9	100.0	97.2
Appalachian OVRDC Avg	80.2	96.1	104.8	46.4	85.5	104.3	71.9
Adams County	79.5	94.3	94.4	43.7	94.0	102.3	61.9
Brown County	86.7	95.5	95.7	53.5	113.0	102.3	72.3
Clermont County	92.5	97.2	97.0	76.6	99.6	99.4	117.5
Gallia County	79.0	98.6	109.5	40.6	84.2	108.4	72.3
Highland County	77.3	94.6	97.5	43.5	81.8	101.7	61.9
Jackson County	77.5	97.1	107.5	41.9	77.1	107.4	74.2
Lawrence County	78.2	97.3	103.4	39.1	83.0	107.8	72.3
Pike County	78.4	94.9	103.6	44.6	79.9	106.4	61.9
Ross County	81.3	95.5	120.1	51.7	76.0	103.0	72.3
Scioto County	76.5	96.7	124.6	33.7	76.8	106.1	72.3
Vinton County	77.9	97.4	106.9	38.2	87.0	103.9	61.9

### 5.4 Remote Workspaces

**Factor Four:** Abundant dedicated and informal remote workspaces.

The Appalachian OVRDC region has very limited designated formal remote working spaces. A prospective remote worker using common internet co-working space search platforms, such as LiquidSpace or CoWorker, will find no listings of co-working space available in the region. And the nearest currently available business incubators are outside of the region in either Cincinnati or Athens, Ohio.

However, within the Appalachian OVRDC region this situation is improving. The recently launched Kricker Innovation Hub at Shawnee State University in downtown Portsmouth, is implementing a building renovation that when completed will include coworking space, business incubation space, and a digital technology makerspace. In 2019 Ohio University Southern announced the creation of “Southern Launch”, a new business incubator located in the Dingus Technology Center on the Ironton campus serving Lawrence County and surrounding communities that will also provide coworking space.

While the availability of formal remote working spaces can be important in supporting remote work, such employment overwhelmingly relies on informal workspaces in homes, libraries, and commercial establishments such as coffeeshops and restaurants. Unfortunately, there is no efficient mechanism for identifying and qualifying such informal infrastructure in the region; a hindrance to remote workers and researchers alike. Nonetheless, searches using internet services such as Google Map reveal the presence of WiFi service availability in public and private locales in most Appalachian OVRDC communities that suggest the potential for, if not the current adequacy of, the development of additional codified remote working space capacity.

## 5.5 Childcare

**Factor Five:** Availability and affordability of acceptable pre-school, daycare, and afterschool care for remote worker families.

Childcare may be an important advantage for the Appalachian OVRDC region in supporting remote work. The job search firm Zippia recently researched over 500 locations and evaluated their status for working families. This evaluation provided a favorable assessment of childcare availability and costs in the region, which compared the percentage of median income to the average daycare cost. Similarly, the childcare search website, CareLuLu.com, reports the average cost for full-time daycare in U.S. counties.<sup>12</sup> This data shows childcare in the Appalachian OVRDC region to be may comparatively less expensive, and therefore attractive, for remote working families. (Table 10) Nonetheless, but a lack of affordable and available childcare undoubtedly remains a persistent problem for many working families that may hinder remote work opportunities for many residents.

Table 10

Area	Yearly Childcare Costs
United States	\$11,896
Ohio	\$10,009
Appalachian OVRDC counties Avg.	\$7,020

## 5.6 Outdoor Recreation

**Factor Six:** Prospective relocating remote workers seeking non-metro locales emphasize regional outdoor recreation opportunities.

The Appalachian OVRDC region has distinctive outdoor recreation assets to differentiate the county in the market for remote workers. The region is home to numerous natural and cultural heritage attractions that significantly occur throughout the region’s counties. While a comprehensive inventory of heritage assets was beyond the scope of the study, a representative cross section of these was compiled at the county level to demonstrate their pervasiveness across the region. (Table 11)

Table 11

County	Attraction
Adams County	Appalachia Discovery Quilt Barn Trail
	Edge of Appalachia Preserve System
	Ohio Brush Creek public access
	Red Barn Convention Center, LLC
	Serpent Mound
	Shawnee State Forest
	The Ohio River Scenic Byway
	John Rankin House
	Chatfield College
	President Ulysses S. Grant
	Ohio River
	Grant Lake
	Indian Creek Wildlife Area
Clermont County	Ohio to Erie Trail
	Cincinnati Museum Center
	East Fork State Park
	Stonelick State Park
	Cincinnati Nature Center
	Clermont County Quilt Trail
	Loveland Castle
	National Underground Railroad Freedom Center
	Lytle Dairy House and Museum

<b>Gallia County</b>	Bob Evans Farm Homestead Museum
	Ariel Opera House (Home of the Ohio Valley Symphony)
	Elizabeth Evans Waterfowl and Birl Sanctuary
	French Art Colony
	Lambert Lands Memorial
	Mound Hill Cemetery
	Raccoon Creek County Park
	Rio Grande Reservoir
	Tycoon Lake State Wildlife Area
<b>Highland County</b>	Rocky Fork State Park
	Fort Hill Earthworks & Nature Preserve
	Paint Creek State Park
	Amish Communities
	Fort Salem Indian Mound
<b>Jackson County</b>	Lake Katharine State Nature Preserve
	Jackson Lake State Park
	Leo Petroglyph
	Buckeye Furnace State Memorial
	Lake Alma State Park
	Hammertown Lake
	The Lillian Jones Museum
	McKinley Park
<b>Lawrence County</b>	Lake Vesuvius
	Timbre Ridge Lake
	Dean State Forest
	Burlington 37 Cemetery
	Historic Iron Furnaces
	Macedonia Church
	Old Route 75 Tunnel
	Symmes Creek-Chesapeake
	Wayne National Forest- Ironton district

<b>Pike County</b>	Brush Creek State Forest
	Buckeye Trail
	Canal Trail
	Cave Lake Center for Community Leadership
	Dogwood Pass Old West Town
	Lake White State Park
	Ohio's Most Perfect Tree
	Pike Lake Forest and State Park
	Scioto Trail State Forest
	Scioto Valley Railroad house
<b>Ross County</b>	Hopewell Culture National Historical Park
	Great Seal State Park
	Earl H Barnhart "Buzzards Roost"
	Adena Mansion & Gardens Historic Site
	Yoctangee Park
	Scioto Trail State Park
	Ancient Ohio Trail
	Story Mound
	Junction Earthworks/ Arc of Appalachia
<b>Scioto County</b>	Shawnee State Park
	Southern Ohio Museum and Cultural Center
	Portsmouth Floodwall Mural
	Turkey Creek Lake
	White Gravel Mines Production
	Raven Rock State Nature Preserve
	Shawnee Lodge & Conference Center
	Portsmouth Raceway Park
<b>Vinton County</b>	Lake Hope State Park
	Zaleski State Forest
	Lake Alma State Park
	Superior Wildlife Area
	Wayne National Forest- Ironton district
	Hocking Hills Region
	Moonville Tunnel

## 5.7 Professional Education

**Factor Seven:** Professional development through training certifications and post-

The Appalachian OVRDC region is home to a significant diversity of post-secondary and professional educational institutions and programs that would serve the continuing education needs of remote workers throughout their career trajectories. (Table 12)

Table 12

Area	PE / College- 15min
Adams County	<ul style="list-style-type: none"> <li>Ohio Valley Career &amp; Technical Center</li> <li>Maysville Community and Technical College</li> </ul>
Brown County	<ul style="list-style-type: none"> <li>Southern Hills Career and Technical Center</li> <li>Brown County Education Service Center</li> </ul>
Clermont County	<ul style="list-style-type: none"> <li>Brighton's Center for Employment Training</li> <li>Interactive College of Technology (ICT)</li> </ul>
Gallia County	<ul style="list-style-type: none"> <li>Putnam Career and Tech center</li> <li>Buckeye Hills Career Center</li> </ul>
Highland County	<ul style="list-style-type: none"> <li>Southern State Community College</li> <li>Chatfield College</li> <li>Wilmington College</li> </ul>
Jackson County	<ul style="list-style-type: none"> <li>Buckeye Hills Career Center</li> </ul>
Lawrence County	<ul style="list-style-type: none"> <li>Collins Center - Ohio University</li> <li>Lawrence County Adult Learning Center</li> </ul>
Pike County	<ul style="list-style-type: none"> <li>Pike County Career Tech</li> </ul>
Ross County	<ul style="list-style-type: none"> <li>Ohio University - Chillicothe</li> <li>Pickaway-Ross Career and Tech Center</li> </ul>
Scioto County	<ul style="list-style-type: none"> <li>Shawnee State University</li> <li>Scioto County Career and Technical Center</li> </ul>
Vinton County	<ul style="list-style-type: none"> <li>Daymar College</li> <li>University of Rio Grande and Rio Grande Community College</li> </ul>

## 5.8 Remote Work Training:

**Factor Eight:** Workforce development programs targeting remote work occupations and remote working skills.

The level that the Appalachian OVRDC region can benefit from increased practice of remote working depends greatly on the extent to which its residents are qualified for occupations amenable to remote working. Fortunately, the region has numerous workforce development resources for education and training that could be directed at remote working preparation. This study identified a representative cross section of relevant workforce development programs by county of operation (Table 13). As remote working has been increasingly adopted as a codified employment model, increasingly administrators of these resources are adapting and customizing programs focusing on remote work occupational skills.

Table 13

County	Program(s)
<b>Adams &amp; Brown County</b>	<p>Computer Numeric Control Classes</p> <ul style="list-style-type: none"> <li>• Adams County Board of County Commissioners</li> <li>• milling, tooling, lathing, blueprint reading, and drafting</li> <li>• IN PROCESS</li> </ul> <p><a href="https://www.adamscountyohecd.com/500000-awarded-for-new-adams-county-training-center/">https://www.adamscountyohecd.com/500000-awarded-for-new-adams-county-training-center/</a></p> <p>Virtual Employment Workshops</p> <ul style="list-style-type: none"> <li>• OhioMeansJobs: Adams-Brown Counties</li> <li>• virtual interviews, working from home, virtual meetings</li> <li>• Free</li> </ul> <p><a href="https://www.omjadamsbrown.org/digital-resource-packets/virtual-employment">https://www.omjadamsbrown.org/digital-resource-packets/virtual-employment</a></p> <p>Grow with Google</p> <ul style="list-style-type: none"> <li>• OhioMeansJobs Adams-Brown Counties</li> <li>• real-person help with google IT/Data certifications</li> <li>• Free Google as well</li> </ul> <p><a href="https://www.omjadamsbrown.org/digital-resource-packets/grow-with-google">https://www.omjadamsbrown.org/digital-resource-packets/grow-with-google</a></p>

<b>Clermont County</b>	<p>Workforce Inventory of Education and Training</p> <ul style="list-style-type: none"> <li>• OhioMeansJobs Butler, Clermont, and Warren Counties</li> <li>• Connects jobs seekers with training for employment opportunities</li> <li>• Can be translated into remote work opportunities and training <a href="https://bcworkforce.com/career-enhancement-solutions/">https://bcworkforce.com/career-enhancement-solutions/</a></li> </ul>
<b>Gallia County</b>	<p>Data Entry Training</p> <ul style="list-style-type: none"> <li>• University of Rio Grande</li> <li>• Online and in-person training for a primarily remote job <a href="https://www.rio.edu/subject/cs/">https://www.rio.edu/subject/cs/</a></li> </ul>
<b>Highland County</b>	<p>Highland Community Action Partnership</p> <ul style="list-style-type: none"> <li>• Connected to OhioMeansJobs Highland County</li> <li>• Career and Occupational assessments to better assist customers in determining their present status and how their skills, interests, and abilities may be transferred into another occupation.</li> <li>• Can connect people with skills assessments for remote work positions</li> <li>• Free resources <a href="https://hccao.org/workforce-services/">https://hccao.org/workforce-services/</a></li> </ul>
<b>Jackson County</b>	<p>Data Entry Training</p> <ul style="list-style-type: none"> <li>• University of Rio Grande- Jackson County branch</li> <li>• Online and in-person training for a primarily remote job <a href="https://www.rio.edu/subject/cs/">https://www.rio.edu/subject/cs/</a></li> </ul> <p>Buckeye Hills Career Center</p> <ul style="list-style-type: none"> <li>• Jackson County Economic Development Partnership</li> <li>• adult and training programs for business and industry in data entry, robotics, etc. <a href="https://www.buckeyehills.net/">https://www.buckeyehills.net/</a></li> </ul>
<b>Lawrence County</b>	<p>Workforce Development Resource Center</p> <ul style="list-style-type: none"> <li>• Resume Writing, Interviewing, Computer skills, and Employability skills training</li> <li>• Occupational skills training, and workshops and seminars <a href="http://www.wdrc.net/">http://www.wdrc.net/</a></li> </ul>
<b>Pike County</b>	<p>Workforce and Business Development Program</p> <ul style="list-style-type: none"> <li>• Community Action Committee of Pike Community</li> <li>• Provides services under WIOA</li> <li>• Career Readiness Workshops and Computer Classes <a href="https://www.workforcebusinessdevelopment.org/">https://www.workforcebusinessdevelopment.org/</a></li> </ul>



<b>Ross &amp; Vinton County</b>	<p>OMJ Open Computer Workshop</p> <ul style="list-style-type: none"><li>• OhioMeansJobs Hocking, Ross, and Vinton Counties</li><li>• South Central Ohio Jobs and Family Services</li><li>• Improve basic computer skills, obtain certifications for future employment that can be used for remote work opportunities</li></ul> <p><a href="http://www.scojfs.org/services/ohio-means-jobs/workshops.html">http://www.scojfs.org/services/ohio-means-jobs/workshops.html</a></p>
<b>Scioto County</b>	<p>Information Technology Professional Program</p> <ul style="list-style-type: none"><li>• Scioto County Career Technical Center</li><li>• Receives Computing Technology Industry Association (ComTIA) certification</li><li>• Computer Hardware and Software, Computer Troubleshooting, Windows Server Administration, Computer Networking, Physical and Digital Security skills development</li><li>• Can apply for scholarships for the training</li></ul> <p><a href="https://www.sciototech.org/secondary/information-technology/">https://www.sciototech.org/secondary/information-technology/</a></p>

## 5.9 Travel Access

**Factor Nine:** Expeditious ground transportation and commercial/charter air travel to major business metros.

The Appalachian OVRDC region has excellent ground transportation with rapid highway accessibility to the economic centers of Cincinnati and Columbus, Ohio, with travel times of 60-90 minutes. (Table 14) Much of the region is also served by GoBus, a federally funded intercity bus service connecting the region to Ohio's urban centers. While the region lacks an airport with scheduled commercial service, it is served by two nearby commercial airports: the Huntington (WV) Tri-State Airport with non-stop service to five U.S. destinations, and the Cincinnati/Northern Kentucky International Airport which offers non-stop passenger service to over 50 destinations in North America and Europe.

Table 14

Area	Major Roads	Airports	Train Line
Adams County	Route:68	Alexander Salamon Airport	Cincinnati Eastern Railroad
Brown County	Routes: 50,52,62	Brown County Airport	Cincinnati Eastern Railroad
Clermont County	Interstate: 275 Routes: 50,52,62	Eastern Cincinnati Aviation	Indiana & Ohio Railway Cincinnati Eastern Railroad
Gallia County	Route:35	Gallia-Meigs Regional Airport	
Highland County	Routes : 50,62	Highland County Airport	Indiana & Ohio Railway
Jackson County	Routes: 35	James A Rhodes Airport	Ohio South Central Railroad
Lawrence County	Routes :52	Lawrence County Airpark	
Pike County	Routes: 23	Pike County Airpark	Norfolk Southern Railway
Ross County	Routes: 35,23,50	Ross County Airport	CSX Transportation
Scioto County	Routes: 52, 23	Greater Portsmouth Regional Airport	Norfolk Southern Railway
Vinton County	Routes: 50	Vinton County Airport	

## 5.10 Financial Incentives

**Factor Ten:** Monetary/assistance for location identification, selection, and relocation.

Many analyses of the rural economic development potential of remote working have focused on attracting relocating remote workers using financial incentives. But as reported in Section 3 of this report, the limited capacities' of programs implemented for that purpose would yield insignificant economic impacts. Moreover, focusing attraction efforts to higher income candidates targeted a small market of wealthier candidates to whom financial incentives are proportionately less influential.

The Appalachian OVRDC region does not currently offer financial incentives for remote workers. The region could, nonetheless, benefit economically from attracting remote workers if the costs

of such initiatives were minimal. Fortunately, this study found and described a taxonomy of relocation candidate prospects whose respective levels of “Appalachian OVRDC Affinity” could reduce or eliminate the need for financial incentives. Efforts to support remote working in the region could include enabling these candidates’ existing, but thwarted, preferences to live in, and work remotely from, there.

### **Appalachian OVRDC Remote Work Readiness Status**

Although the remote working scorecard information to date on the Appalachian OVRDC region is not comprehensive, it is nonetheless already encouraging. While there are several areas for improvement, the region is already fairly well positioned to begin supporting and attracting remote workers – at least to some areas of the county. The region has a Positive status on Attainable Housing, Cost of Living, Outdoor Recreations, and Professional Education. (Table 15) Of the two factors assessed as “Negative” in the region, Remote Work Training is the more significant one given its broader relevance, whereas the current lack of Financial Incentives for attracting relocating remote workers has a far more limited applicability. Where the region’s status is more problematic, or “Neutral”, such factors as Internet Access, Remote Workspaces, Childcare, and Travel Access, decisions on potential enhancement efforts should first recognize there are multiple ways to capitalize on the Appalachian OVRDC region’s remote working opportunity that will yield different types/levels of economic outcomes to different beneficiaries. Decisions on how to invest in remote working readiness will require understanding of the connection between those strategic options and community development priorities.

Table 15

Appalachian OVRDC Remote Work Readiness Status		
POSITIVE	NEUTRAL	NEGATIVE
Attainable Housing	Internet Access	Remote Work Training
Cost of Living	Remote Workspaces	Financial Incentives
Outdoor Recreation	Childcare	
Professional Education	Travel Access	

## **6. Appalachian OVRDC Region and the Remote Working Opportunity**

To the extent it lessens the geographic proximity prerequisite of the employer/employee relationship, remote working holds significant promise as a non-metro and rural economic development opportunity. As the set of occupations that can be performed remotely grows, that opportunity will expand to encompass a broader range of both demographics and geographies. This also increases the number and locations of communities that could benefit from incorporating remote working into their economic development strategies.

As more communities engage, we can expect remote working support strategies to grow in sophistication beyond the current focus on incentive-based, new resident attraction programs targeting specific, narrow socioeconomic segments. Successful support program will evolve into comprehensive multifaceted portfolios designed to capitalize of the spectrum of economic development opportunities offered by remote working. As with any portfolio, different elements will vary in their return on investment (ROI). The challenge to the Appalachian OVRDC region's leadership is to build a remote working strategy portfolio that, when successful, yields ROIs that best address the regions' communities' priorities.

### **6.1 Appalachian OVRDC Employment and Out-Commuting**

Remote working is particularly potentially advantageous to residents of the Appalachian OVRDC region due to the high levels of out-commuting that characterizes the region. Over 50% of the region's employed residents commute to jobs in another county. (Table 16) While many of the commutes may be within the Appalachian OVRDC region, nonetheless it is at a considerable expenses to those employees as it means that over 100,000 of the region's residents spend an average of 60 minutes and nearly \$29 in their daily commutes. Remote working provides an alternative to these physical commutes and therefore a reduction of commuting costs in both time and money.

Table 16

Appalachian OVRDC Labor Force and Commuting					
Area	All employees working in county	Employed but living in other counties	Employed and live in County	Percent worked OUT county	Percent with commute of 30 minutes or more
Adams County	5,501	2,315	3,186	37%	50%
Brown County	7,481	3,900	3,581	58%	57%
Clermont County	58,584	34,875	23,709	42%	47%
Gallia County	11,020	5,756	5,264	69%	39%
Highland County	10,009	4,938	5,071	53%	42%
Jackson County	10,177	4,853	5,324	62%	35%
Lawrence County	12,552	5,747	6,805	42%	31%
Pike County	9,878	5,885	3,993	58%	38%
Ross County	28,003	13,532	14,471	69%	31%
Scioto County	22,677	8,315	14,362	74%	33%
Vinton County	2,417	1,205	1,212	40%	50%

## **6.2 Appalachian OVRDC and Remote Worker Attraction**

One of those strategic options is the attraction of currently non-local remote workers to relocate to the Appalachian OVRDC region. This is the strategy that has been most commonly practiced in other areas to date, and the one that has achieved the most prominence through local and national media coverage. In particular, it is the model employed in the well-known “Ascent West Virginia” program which, because of its prominence and proximity to Ohio, had both stimulated and shaped many on-going community discussions on the remote working opportunity.

The economic development potential and limitations of such “outsider attraction” strategies was discussed in Section 3 of this report. Such programs were acknowledged to have demonstrable, quantifiable economic impacts when successfully implemented. But at the same time, these programs are cost-limited in terms of their economic returns, with most providing modest expected effects on growth of local employment, income, and economic output.

As a result, such programs seem to be fated to “succeed too small” and to be prohibitively expensive to scale up to achieve economically significant outcomes. Moreover, the most feasible option to increase their significance is to focus attraction efforts to ever higher income demographics, which lessens their probability of success by targeting a much smaller number of wealthier candidates to whom financial incentives are proportionately less influential. As previously concluded, this reality calls into question the wisdom of designing rural economic development strategies that primarily capitalize on the potential benefits of remote working through non-local attraction strategies. Nonetheless, an attraction strategy can be a useful component of a potential, broader “Appalachian OVRDC Remote Working Portfolio”.

## **6.3 Appalachian OVRDC Resident Remote Working Economic Benefits**

Given the high costs of incented attraction strategies, it is fortunate that remote working has more economic development potential for the Appalachian OVRDC region than just the economic impacts created by the attraction of relocating remote workers. Moreover, in many cases these other forms of economic outcomes may provide benefit that better align with regional economic and public policy priorities. Several such examples are described below to illustrate the breadth of the additional potential outcomes and benefits:

### **1. Increase Appalachian OVRDC income and local spending from “traded” remote worker earnings**

Remote work can increase the number of Appalachian OVRDC residents employed outside of the county whose incomes then accrue in the region and grow the local “economic pie”. Not only might remote work increase its residents’ employment opportunities, thereby enabling them to maximize their earning potential, those

increased earnings are imported into the region's economy to circulate therein with benefits to local businesses and employees.

**2. Reduce retail leakage from physical out-commuting.**

Pre-Covid, over 51% of employed residents of the Appalachian OVRDC region physically commuted outside of their resident county to work, often to jobs located outside of the region itself. While this has the effect of importing income into the region, physical out-commuting contributes to retail spending "leakage" from workplace area spending. Continuing current remote work and converting future physical out-commuting to remote work will lessen retail leakage to the benefit of Appalachian OVRDC businesses.

**3. Reduced physical commuting benefits both wallets and the environment.**

Remote work, by reducing physical commuting, is a significant cost savings for workers, as well as benefit to the environment. In the U.S., an estimated \$758 million is being saved per day by post-COVID remote workers, with 890 million fewer miles being traveled daily by former commuters. In the Appalachian OVRDC region, during 2019, 51% of the region's employed residents "out commuted". Replacing a daily automobile commute of 50 miles with remote work saves that employee over \$7,250 and 250 hours annually. Converting just 10% of typical the region's out-commuting jobs with remote work could put additional \$70 million into Appalachian OVRDC residents' pockets and 2.5 million hours back into their schedules each year.

**4. Retain local graduates/early career residents.**

Recent school graduates – whether high school or postsecondary – who desire to remain in their community are often compelled to relocate for early career employment due to a lack of job opportunities aligned with their skillsets and professional interests. Proactive remote working outplacement would greatly increase their prospects of employment in an intended field while enabling continued local residency.

**5. Increase labor force participation.**

The labor force participation rate is the proportion of the working-age population that is either working or actively looking for work. This rate has been declining across the U.S. for several years. The decline has been attributed to several factors, some of which – regional skills gaps, workplace accessibility, work schedule imbalance – could be addressed by the location and work schedule flexibility afforded by remote work.

**6. Enhance upward socioeconomic mobility opportunities for residents.**

Like labor force participation, socioeconomic mobility - the movement of people from one social class or economic level to another – has also been declining across the U.S. from causes that may be addressable through increased remote work. By greatly

expanding the scale, scope, and diversity of avenues for employment, remote working increases opportunities for both workforce entry and career advancement enabled by worker experience and skills growth. It may also provide greater variety for flexible mid-career training and facilitate re-employment adjustments by mediating relocation.

#### **7. Diversify employment and employer regional portfolios.**

Remote work can infuse a community with skills and knowledge it may not otherwise possess. Increased remote work both by current and new residents often involves occupations or industries uncommon in a regional economy due to the lack of a local employer in such sectors. Conversely, diversification can also result in an enhanced ability to attract locally under-represented business and industry types as otherwise workforce- or skill-constrained location decisions are mediated through increased reliance on remote workers beyond the local labor shed.

#### **8. Increase Appalachian OVRDC human/social capital.**

As remote workers migrate into a community, they contribute skills and capabilities – “social capital” – that extend beyond their economic value. Many areas of the U.S. are experiencing declines in the share of prime work age (25-54) segments in their population, a segment whose diverse roles as citizens, parents, volunteers, entrepreneurs, etc. are key to sustained community vitality. Fortunately, this essential “young professional” demographic closely mirrors that of many prospective relocating remote workers.

### **6.4 Capitalizing on Ohio (and Appalachian OVRDC) “Stickiness”**

One of the most interesting population dynamics statistics available from the U.S. Census is data on how people living in a state came to be there. The Census conducts routine surveys that measure how many people migrate between states and how many people stay in the state of their birth. States with a large proportion of residents drawn from other states are termed “Magnets”. States with a large share of people born there are described as “Sticky”. It is possible for a state to be both, neither, or a combination.

A 2009 analysis of Census data by the Pew Research Center found that, for example, in California, only 38% of adult residents come from out of state, which ranks it 28th on the Magnet scale. Therefore, for all its historic allure, the Golden State is not a Magnet. But 69% of adults born in California still live there, ranking it 4<sup>th</sup> highest nationally in that regard. So, California is designated a “Sticky” state.<sup>13</sup>

According to the U.S. Census, Ohio attracts an even smaller share of its population from other states than California. Much smaller. In fact, Ohio ranks among the lowest states (47<sup>th</sup>) on the US magnet scale for attracting new residents from out of state. Ohio is decidedly no “Magnet”.



But on the other hand, many of its natives choose to remain to remain in Ohio. The state ranks 12<sup>th</sup> nationally in that regard. Ohio is definitely a “Sticky” state.

### **Philopatry as an Appalachian OVRDC Competitive Advantage**

One aspect of U.S. demographic migration that the Census does not report on are the number of people who leave, but then return to, their state of birth. In biology this pattern is termed “natal philopatry” and describes animals that return to their birthplace to breed. A common example is the salmon returning the headwaters of the stream in which they were spawned. When applied to humans this same migration pattern describes people returning “home” to reunite with social networks, rejoin their families, or perhaps begin their own family.

Demographers infer that natives who leave “sticky” states, like Ohio, are more inclined to return. This especially true when that departure was necessitated by circumstances that either lapse, such as military services or college, or are compelled against their preferences to seek employment. The tendency is that once such obligations are absent, and if circumstances allow, they are highly inclined to “go home again”.

Given that out-migration is often a function of employment seeking, the potential remote working has to increase residential choice mobility should remove a major barrier – employment - for people otherwise thwarted in a desire to relocate. This may be especially true for remote workers highly motivated to return to “sticky” Ohio, and Appalachian OVRDC can capitalize on this inclination by focusing its remote worker support or attraction efforts toward such prospects. Leveraging the strength of relocation prospects’ “Appalachian OVRDC affinity” could decrease, and even eliminate, the need to offer financial incentives.

An “Appalachian OVRDC Remote Working Affinity” taxonomy was developed (Table 17) to differentiate categories of prospective remote workers by their demonstrated (or likely) affinity for remaining in or relocating to the Appalachian OVRDC region. It should be stated that scholarly and professional research on location preferences in remote working is limited. While the below taxonomy is to be considered as conceptual (rather an empirical) in nature, it is intended to stimulate and inform a more granular dialogue on intended beneficiaries in a consideration and/or design of remote working support strategies.

In this taxonomy the categories are arranged in order by presumed affinity to being located in the Appalachian OVRDC region from the highest (#1) first to the lowest (#7). From a marketing perspective, it is expected that the declining affinity strength in later taxonomy categories is offset by a correlated expansion in market size. For example, while #1 CONTINUE category population has a high affinity due to their current Appalachian OVRDC residency, it represents far fewer people than does the much larger, but Appalachian OVRDC -indifferent, population of #7 INCENT category.

Table 17

Appalachian OVRDC Remote Work Economic Development Strategy Portfolio	
<b>1. CONTINUE</b>	Support continued remote working by current residents
<b>2. CONVERT</b>	Help physical out-commuters become remote workers
<b>3. UPSKILL</b>	Provide remote work training and outplacement for current residents
<b>4. RETAIN</b>	Remote work outplacement for graduates and likely out-migrants
<b>5. REPATRIATE</b>	Solicit return of former residents via remote working
<b>6. (RE)CONNECT</b>	Attract new remote working residents with social/family connections
<b>7. INCENT</b>	Attract remote workers with no connection using incentives

### **1. CONTINUE: Continuation of remote working by current residents**

Surveys have reported that most US remote workers would prefer to continue to work remotely post-COVID for some or all of their work week. Hybrid models combining in-workplace with remote working are expected to become a standard structure for many businesses. Current residents of the Appalachian OVRDC region who already work remotely, and who wish to continue to do so post-COVID restrictions, may be the most immediate subjects for supportive programs.

### **2. CONVERT: Conversion of current and future physical out-commuters to remote workers**

“Out-commuting” by Appalachian OVRDC residents to jobs outside their home counties was very common pre-COVID. The U.S. Census reported that in 2018 over half (51%) of the region’s employed residents “out commuted” – to work in other counties. From an economic benefit perspective, it is significant that out-commuting not only enables people to continue living in their preferred locations, but it also effectively imports a large net amount of additional income that expands and infuses the Appalachian OVRDC economy. But physical commuting is high cost in time and money to local residents and is a leading source of “retail leakage” that diminishes the regional economy. Enabling the conversion of current and future physical out-commuting to remote working enables more Appalachian OVRDC residents to earn higher incomes while remaining – or perhaps moving to the region.

### **3. UPSKILL: Expand remote working by current residents through training and outplacement**

Remote work can offer many benefits to employees, but the reality is that many Appalachian OVRDC residents are employed in occupations where remote working is infeasible. Others may desire but lack the job skills required by remote work occupations. And others may be unfamiliar with remote working opportunities and require outplacement assistance. Research finds that remote working employees typically earn higher incomes primarily because the expanded range of employment opportunities it can offer enables workers to maximize their earnings potential through better skill utilization. These Appalachian OVRDC residents would

benefit from assistance in both enhancing their skillsets through training and leveraging those skills through effective remote work employment seeking practices.

**4. RETAIN: Retention of Appalachian OVRDC graduates and likely out-migrants seeking remote employment**

Each year the Appalachian OVRDC region loses residents and graduating students who might not have left had they been able to find satisfactory employment in the county. Remote employment could enable many of them to remain in the region. This represents a considerable market for remote working support.

**5. REPATRIATE: Attraction of returning (philopatric) previous remote working residents**

Many of those who either reluctantly or voluntarily departed the Appalachian OVRDC region earlier in their lives and careers may desire the opportunity to return as residents again. With the exception of retirees or the self-employed, historically such decisions were predicated on existing relevant employment opportunities in the county, or at least within physically commuting distance. Therefore, most return-motivated former residents were thwarted in their preferences by a lack of such jobs in the Appalachian OVRDC labor shed. As remote working increasingly remove local employment as an impediment, enhancements to the region as “remote work-ready”, along with measures intended to facilitate first-time home buyers, would enable self-incented relocations.

**6. RECONNECT: Attract new remote working residents with social/family connection to Appalachian OVRDC**

One need not be native or former resident of the Appalachian OVRDC region to have an affinity for the county based on other forms of social or personal connection. For some it could be a strong kinship connection based on historic or current family ties; others may have active business, academic, or recreational connections. An often-overlooked economic development opportunity is the favorable exposure that tourism can provide to visitors – especially entrepreneurs - who previously had not conceived of the region as a potential relocation site.

**7. INCENTIVIZE: Attract new residents with no connection using (non)/financial incentives**

As described in section 3 of this report, a strategy using financial incentives to attract relocating remote workers could purchase some number of new residents. But financial incentives cannot offset unresolved remote working disadvantages in the Appalachian OVRDC region and therefore unlikely to succeed in areas of the county of the greatest economic need. Limited funds for direct financial incentives also inevitably require the design and management of selective – and therefore discriminatory – criteria for their allocation. An existing remote working incentive programs are already experiencing political backlash from residents questioning the appropriateness of subsidizing higher-income new residents. Funding envisioned for financial incentives could likely be put to better use supporting enabling actions serving higher affinity categories.

## **7. Conclusion and Findings**

This study was performed to inform ongoing discussions and future decisions by Appalachian OVRDC public policy leadership on remote working support and attraction opportunities, and their potential economic benefits. The initial project focus was on assessing remote working's economic development significance, identifying key factors by which to assess the region's current level of remote working readiness, and describing aspects that could be enhanced. Subsequent research characterized multiple economic benefits and the diversity of potential beneficiaries of a comprehensive Appalachian OVRDC remote working-based economic development strategy.

### **7.1. The Recent State of U.S. Remote Work Trends**

The study found the remote working necessitated by the COVID pandemic has accelerated pre-existing trends and revealed market preferences that create opportunities for non-metro communities to both retain and attract remote workers, especially young professionals and working family demographic segments, with preferences for smaller communities but whose relocation had been previously thwarted by limited local employment opportunities. The broader use and acceptance of remote working established during the pandemic is expected to reduce this limitation, especially for communities that are well prepared to support the infrastructure, services, and other needs/preferences of distance workers.

- Forced remote working compelled by the 2020 COVID pandemic both accelerated pre-existing trends and codified remote work for broad segments of the U.S. workforce with enduring effects yielding new models of employment.
- The resulting mitigation of the historical linkage of proximity of employment and residential locations is enabling greater flexibility for people to separately consider where they want to live, from where they want to work.
- Historically, many people expressed who strong preferences to live in smaller cities, towns and rural areas had been compelled to either live (or relocate) close to metropolitan-based employment or endure onerous physical commutes. Preferences for non-metro residency increased as a result of the COVID pandemic.
- Remote working therefore creates economic opportunities for non-metro areas previously experiencing population and talent loss from reluctant out-migration and thwarted in-migration.

## 7.2 Remote Working and Rural Economic Development

The study found that high-profile city and state programs that have driven and framed many remote working discussions were primarily focused on incentive-based attraction strategies. An analysis of the likely economic impacts of those programs estimated that for most of the programs the results of successful implementation would be only modest. Considering the size of the local and state economies in which these benefits would accrue, the study concluded it was unlikely such incented-attraction programs would be sufficient to yield significant economic benefits, especially considering their costs.

- Some non-metro areas have been quick to recognize and attempt to capitalize on the rural economic development potential of remote working. To date, nearly all have emphasized the attraction – usually through financial incentives – of non-local, metro area remote workers to relocate. Their common premise is that such in-migration will grow the local economy from the spending of additional income provided through remote employment.
- Such “recruitment of income” strategies are a logical and accepted economic concept that should indeed eventually lead to increases in employment, income, and economic activity. However, the significance of that effect depends on the number, income, and spending behavior of the attraction remote workers, as well as the scale and nature of local economic growth priorities.
- Despite their high profiles in media and local policy discussions, the experience of most of these initiatives is very limited in both scope and time. The study analyzed several of the more established program to assess their potential economic significance, assuming they succeeded in their defined objectives. This analysis found that only more substantially funded programs (Maine and West Virginia) might expect success to yield appreciable number of jobs and other economic impacts.
- Viewed in the context of the scale of the local and state economies in which they occur, even “successful” remote workers attraction incentive programs are unlikely to yield significant local economic benefits. Such programs seem to be fated to “succeed too small” and to be prohibitively expensive to scale up to achieve economically significant outcomes. Moreover, the most feasible option to increase their significance is to focus attraction efforts to ever higher income demographics, which lessens their probability of success by targeting a much smaller number of wealthier candidates to whom financial incentives are proportionately less influential.

### 7.3 Remote Work Attraction/Readiness Factors

These study findings challenged the wisdom of designing rural economic development strategies that primarily capitalize on the potential benefits of remote working through non-local attraction strategies. The study characterized several alternative remote working strategies for rural economic development and the factors that, in addition to financial incentives, would distinguish a community as “remote work-ready”. Academic and professional research literature on remote working requirements was analyzed and synthesized in the format of a “scorecard” describing the nature (and to a lesser extent the priority) of several factors recognized as affecting location decisions of remote workers. Applying that assessment tool to the Appalachian OVRDC region found that while there are several areas for improvement, the region is already fairly well positioned to begin supporting and attracting remote workers – at least in some areas.

- Analysis of remote worker literature identified several factors validated as distinct priorities to the remote worker, either as prerequisites to their employment or as highly preferred advantages to their former, typically urban, location. Ten leading factors were incorporated in a “scorecard” structure for a preliminary assessment of the competitive position of the Appalachian OVRDC region from the perspective of relocating remote workers.
- Although the remote working scorecard information to date on the Appalachian OVRDC region is not comprehensive, it is nonetheless already encouraging. While there are several areas for improvement, the region is already fairly well positioned to begin supporting and attracting remote workers – at least to some areas of the county.
  - The Appalachian OVRDC region appears to possess advantages in attainable housing, cost of living, outdoor recreation, and professional education
  - It offers advantages and disadvantages in internet access adequacy, remote workspaces, and childcare, as their sufficiency varies county-wide, or existing capabilities require enhancement
  - Ground transportation access within the region offers advantages for some remote work substitution of physical out-commuting, especially with hybrid work models, but it is likely that perceptions of commercial air travel inconvenience will be detrimental for some prospects
- Capitalizing on existing advantages should be combined with efforts that enhance and extend positive factors geographically while addressing areas of perceived (rightly or wrongly) deficiencies. Discussion of potential enhancement efforts should first recognize there are multiple ways to capitalize on the region’s remote working opportunity that

will yield different types/levels of economic outcomes to different beneficiaries. Decisions on how to invest in remote working readiness will require understanding of the connection between those strategic options and community development priorities.

#### **7.4 Appalachian OVRDC region and the Remote Working Opportunity**

The study concluded that remote work offers significant potential economic development for a non-metro areas, like the Appalachian OVRDC region, by lessening the conventional geographic proximity prerequisite of the employer/employee relationship. Through remote working , residents' ability to secure employment need not be dependent on employers being located nearby or necessitate costly physical commuting. Moreover, remote work offers advantages to both current residents who wish to remain in the region and current remote workers desiring to relocate to the region. As remote work business models evolve, the set of occupations that can be performed remotely is growing, expanding opportunities to encompass a broader range of both demographics and geographies. This correspondingly increases the economic development strategies by which communities can benefit from remote working.

The Appalachian OVRDC region can benefit from the experience of other communities' remote work models to design a comprehensive, multi-faceted remote working support plan that advances beyond the current focus on incentive-based, new resident attraction programs that target specific, narrow socioeconomic segments. A diversified policy portfolio enabling increased remote work by both current and prospective residents will serve broader, more diverse constituencies to greater economic effect. As with any portfolio, different elements will vary in their public policy "return on investment" (ROI). The challenge to the Appalachian OVRDC region's leadership is to build a remote working strategy portfolio that, when successful, yields economic benefits that best address the priorities of the region's communities and citizens.

END

## Appendix 1 – Remote Work Program Examples

State/City	Incentive/Plan
West Virginia	"Ascend West Virginia"; \$12,000 subsidy (10k over monthly payments over 2 years, and final \$2k at the end of the second year), free travel to any remote workers moving to WV countryside, free use of recreational facilities. This includes 3 towns: Morgantown, Shepherdstown, and Lewisburg.
Vermont	\$10k over two years towards remote workers in tech industries. Two explicit goals; 1. foster VT's tech industry, and 2. combat VT's image of being "unfriendly to new businesses".
Topeka, Kansas	\$15,000 for home buyers, \$10,000 for renters in incentives; this is famously one of the more generous programs, particularly because homes in Topeka are very cheap to begin with; the goal is specifically to attract high-skill workers.
Baltimore, Maryland	\$5k towards down payment only on fixed-mortgage loans.
Maine	Up to \$15,660 in tax rebates; specific consideration being given to degree holders, especially STEM majors; specifically outlined to fight the decreasing youth population in Maine.
Tulsa, Oklahoma	\$10,000 in cash, plus free co-working space; one of the more generous programs.
Fayetteville, Arkansas	\$10,000 in cash, plus a free mountain bike; particularly successful, attracting 29,000 workers from every state and countries around the world.
Savannah, Georgia	\$2,000 in reimbursement for moving here specifically for tech-workers, plus additional grants for job-creation.



<b>New York/Seattle/others</b>	Conversion to "Smart City", a city that maximizes efficiency by connecting mobile devices, software solutions, user interface and communication networks. Through private-public partnerships, New York and other major cities can create remote working hubs to facilitate remote work; there are obviously other goals of a smart city, such as energy efficiency, but attracting remote workers poses another goal.
<b>Remote Shoals, Alabama</b>	Up to \$10,000 over the first year depending on wages; requires an income of \$52k annually, likely in order to target high-skill workers.
<b>Hawaii</b>	Interestingly, no incentive other than free airfare; one of the explicit goals was to repair Hawaii's tourism industry, which declined 90% during the 2020 COVID pandemic.
<b>Ireland</b>	Open 400 remote work hubs by 2021 across rural Ireland connected to the same network; this includes a mix of public facilities and partnerships with private firms such as bars and restaurants.

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## End Notes

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- <sup>1</sup> “What’s next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries”  
(<https://www.mckinsey.com/featured-insights/future-of-work/whats-next-for-remote-work-an-analysis-of-2000-tasks-800-jobs-and-nine-countries#>)
- <sup>2</sup> <https://globalworkplaceanalytics.com/work-at-home-after-covid-19-our-forecast>
- <sup>3</sup> <https://www.upwork.com/i/future-workforce/fw/2020/>
- <sup>4</sup> <https://resources.owllabs.com/state-of-remote-work/2020>
- <sup>5</sup> Ibid.
- <sup>6</sup> [Americans say there’s not much appeal to big-city living. Why do so many of us live there? - The Washington Post](#)
- <sup>7</sup> <https://news.gallup.com/poll/245249/americans-big-idea-living-country.aspx>
- <sup>8</sup> <https://news.gallup.com/poll/328268/country-living-enjoys-renewed-appeal.aspx>
- <sup>9</sup> <https://www.zillow.com/research/telecommute-2-million-buyers-27866/>
- <sup>10</sup> <https://hbr.org/2021/04/childcare-is-a-business-issue>
- <sup>11</sup> <https://docs.fcc.gov/public/attachments/FCC-20-188A1.pdf>
- <sup>12</sup> <https://www.carelulu.com/daycare-preschool/athens-oh> (7/28/2021)
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