Health of the Humanities in Appalachia

An Assessment of NEH Funding to Rural Appalachia (2018-2023)

2024 internship final report*

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Office of Data and Evaluation National Endowment of the Humanities

*All views and errors within this report are the author's own and do not necessarily reflect the views of NEH.

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Overview

Appalachia is renowned for its folk traditions and storytelling, including music and literature, which are often fostered and preserved by the humanities. Oral and written storytelling has been a significant medium for preserving and conveying the region's history and values. Bluegrass and country music are integral parts of its cultural identity, and Appalachian literature has also gained recognition. These artists often explore themes of poverty, identity, and the struggle against external stereotypes. Additionally, higher education and community organizations have held a large role in fostering the humanities in Appalachia, with several universities in the region offering strong humanities programs. Numerous organizations, such as the Appalachian Studies Association and local arts councils, work to promote the humanities. They organize events, conferences, and publications that highlight Appalachian culture and scholarship.

While Appalachia has deep historical and cultural roots, the region faces many challenges. It is often subject to economic hardship, negative stereotypes, and misrepresentation in popular media, which can overshadow the rich cultural contributions and complexities of Appalachian life. Appalachia faces significant poverty rates and limited access to resources, with 14.7% of all persons from 2016-2020 facing poverty (compared to the 12.8% national percentage) (ARC, 2022). Appalachian poverty rates by county range from 6.5% to 41.0%.¹ Additionally, Appalachia's figure is 82% of the nation's median household income (\$61,688 compared to \$75,149) (ARC, 2022). These statistics provide a glimpse into long-standing economic disparity in the region, which impacts funding opportunities and resources for the humanities.² Whether by providing grants to assist small-scale museums in day-to-day functions, supporting public libraries in their programming costs, or assisting with paying wages of cultural workers, NEH can contribute to preserving cultural traditions in the face of difficult economic statuses across Appalachia.

Importance to NEH and ODE

NEH serves and strengthens our nation by supporting high-quality projects and programs in the humanities and by making the humanities available to all Americans. The Office of Data and Evaluation supports NEH by fostering a thriving humanities sector through data collection and analysis. This project provides an overview of the state of humanities funding in a region with strong ties to culture and history. There have been numerous Appalachia-specific projects funded by NEH, including the Encyclopedia of Appalachia (East Tennessee State University, 2000). A 2022 Humanities article also explores culinary culture in the region and highlights several NEH-funded projects (Stewart, 2022).

Outside of NEH, there are many scholarly works on the cultural aspects of Appalachia. One piece by <u>Dufaure (2016)</u> introduces a phenomenon called "cultural immobility" in the region:

"The regionalist movement of the Appalachian Renaissance has consisted in creating and promoting a form of cultural immobility in the American Mountain South by turning the region into a touristic paradise forever dependent on the consumer codes of the nation. What does Appalachia evoke today in the minds of Americans? It remains chiefly synonymous with a wild place of vacation, where tourists can escape their hectic urban lives for a few days, where the rich can acquire luxurious property and build fancy mansions overlooking the natives' own dilapidated mobile-homes, which are often relegated in the dark cramped valleys of the region and are thereby dangerously exposed to floods." (p. 96)

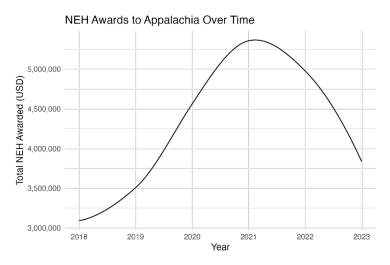
¹ See Appendix B.1 for visualizations of poverty and unemployment.

² For additional visualization of poverty and unemployment rates, see Appendix B.

"the commodification of the region has ended up betraying the very soul and identity of the place, distorting its essential values the better to package and sell Appalachia to outsiders:" (p. 97)

Put simply, the Appalachian region has found itself in a paradox, confusing heritage with hermitage (Dufaure, 2016). As a resident of Appalachia, leaving is difficult, often caused by financial difficulties or even a sense of loyalty; yet outsiders flock to its natural beauty and many excursions. The region has become a sort of getaway resort, reinforcing the tourist traps in which its residents exist. From personal experiences, residents are loyal to the region because "how could they ever leave such a beautiful place", yet often live in food deserts, poverty-stricken communities, and/or static employment industries (i.e., coal, lumber, etc.). This project allows NEH the space to answer an additional important question: How do we think about rurality? We often use a definition of rural as juxtaposed with urbanism, however, in the context of Appalachia, rurality is viewed as a cultural phenomenon preserved by many humanities efforts.

This project is also of importance to NEH because it introduces economic data to be considered in future analyses. Using this data, users can uncover trends in the economic hardship faced by certain counties in Appalachia and examine if humanities sectors can be prioritized to create new opportunities for employment and education. **Figure 1** depicts the trend of NEH funding to the Appalachian region over time using publicly accessible data from data.gov. Funding trended upwards until around 2021, peaking at approximately \$6 million. However, the amount of funding dropped off after 2021. This provides an interesting insight into NEH funding, especially around emergency relief funding during the pandemic. Funding in Appalachia increased as NEH provided grants through the CARES act but is now returning to the pre-pandemic levels of approximately \$4 million.



By examining NEH funding in Appalachia from 2018-2023, paired with economic data, this analysis will highlight the types of grants NEH has awarded within the region, and provide a roadmap for any future endeavors to prioritize more funding to the community.

Methods and Data

For detailed descriptions of the variables included in the analysis, please refer to the accompanying codebook.

A. Appalachian Region Designation

To analyze the health of the humanities in the Appalachian region, it's firstly important to note which areas are included in the region. Based on the Appalachian Regional Commission (ARC) designation, Appalachia consists of 423 counties across 13 states. This includes all of West Virginia – the only state completely within the Appalachian Region – and parts of 12 other states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia (<u>ARC, 2023</u>).³

B. NEH Funding Data

NEH grant data is exported from the publicly accessible database <u>data.gov</u>. Data from the 2010s and the 2020s are exported and merged for 2018-2023. The data is cleaned to include Appalachian counties using designation from ARC. The State Humanities Councils are dropped from this dataset, as not all humanities councils are located in the designated Appalachian region. Additionally, funding to Humanities Councils is reported as lump sum awards, rather than sub-awards granted throughout the state. This makes identifying the amount of funds granted within the region more difficult. Finally, project discipline is recategorized for easier analysis.⁴

C. Economic Data

Unemployment data is from the Local Area Unemployment Statistics (LAUS) from the Bureau of Labor Statistics (<u>US Bureau of Labor Statistics</u>, 2024</u>). Each export includes county-level unemployment rates in a given year. Data from 2018-2023 are exported, cleaned, and merged into one dataset. Poverty data is from the Small Area Income and Poverty Estimates (SAIPE) from the US Census Bureau (<u>US Census Bureau</u>, 2023). The data export includes years 2018-2022 (2023 is not yet available). The final dataset includes data for 310 individual NEH awards to 111 counties across 13 states in Appalachia. Due to the missing poverty data for 2023, analyses using the full dataset are until 2022.

D. IPEDS Data

Higher education institution data is from the Integrated Postsecondary Education Data System (IPEDS), which is the core postsecondary education data collection program for the National Center for Education Statistics (NCES) (National Center for Education Statistics (NCES), 2023). The data contains institutions that are currently active, and that participate in Title IV federal financial aid programs for which IPEDS is mandatory. The export includes data for all institutions from 2018-2023, subsetted by those included in the Appalachian region that received funds from NEH. The main variable of analysis from this data is the basic Carnegie Classification. These classifications provide different lenses through which to view U.S. colleges and universities, offering researchers greater analytic flexibility (National Center for Education Statistics (NCES), 2023).

³ For the entire list of counties within each state, see Appendix B.

⁴ For additional details, see Appendix B in the Codebook.

E. Methodology

The analysis of the health of the humanities in Appalachia occurred in multiple stages. First, the analysis trends over time for funding from NEH, combined with economic data, as shown in **Figure 1 and Appendix B**. The second stage included visualizations and summary statistics for the combined data sources. Summary statistics included tables with the total, average, and max NEH grants given for the entire dataset. Additionally, the total count of grants awarded to organization types, divisions, disciplines, and higher education institutions are included.⁵

The final stage of the analysis included an interactive dashboard that displays the aforementioned data visualizations in one place. This dashboard, which can be found <u>here</u>, provides users with comprehensive statistics of NEH funding details and economic variables. The main dashboard includes a map of the Appalachian region filled by amount of funding by NEH, accompanied by economic details for each county. Users can filter by state and year to view specific details for each location in the region. The secondary tabs include summary statistic tables of (1) awards granted, (2) the amount funded to each discipline and NEH division, (3) the amount funded to higher-education institutions, HBCUs, and other organization types⁶, and (4) an overview individual awardees' project names and institutions. When filtering by state and year, users can hover over each county in the state to view the name, amount funded, unemployment rate, and poverty rate.

Key Takeaways

NEH has allocated nearly \$29 million to the Appalachian region over the last five years. The most financially supported discipline was history, with 138 unique history projects (approx. \$12.8 million). NEH's Education and Research divisions provided the largest funding totals (\$6.4 million and \$5.9 million respectively).⁷ Of this amount, approximately \$9.3 million has gone towards research universities with high research output (R1 universities).⁸ In total, \$18.4 million has been awarded to higher education institutions, with approximately \$500,000 awarded to five HBCUs in the region.⁹

These primary amounts of funding show that the support for humanities projects in Appalachia take many forms. For example, NEH awarded \$30,000 to the West Virginia Mine Wars Museum in 2020, allowing the museum employees to retain employment during the pandemic, as well as digitize their collection for online educational efforts. Nearly \$90,000 was granted to the Historical Society of Western Pennsylvania in 2019 to create an online database recording the history of Kennywood Park. An award of \$400,000 went to Pellissippi State Community College to fund The Appalachian Heritage Project, which assisted with building a library filled with compelling stories of the region. This is only a small window into the vast range of unique and important projects in Appalachia funded by NEH.

By examining funding in Appalachia, this analysis provides a benchmark for the amount of funding provided by NEH to the region. This analysis also highlights potential gaps in the region where funding may be missing to preserve humanities and culture. However, it is important to note that funding as a metric of support has

⁵ To view the summary statistic tables, see Appendix B.4-B.9.

⁶ It is important to note that there are no Tribal Colleges in the Appalachian region.

⁷ See Appendices B.5-B.6 for overviews of awards granted by discipline and division.

⁸ See Appendix B.8 for an overview of awards to HEIs.

⁹ See Appendix B.9 for an overview of awards to HBCUs.

limitations. Simply looking at the amount awarded by NEH does not fully uncover details such as employment retention and hiring, enrollment in education programs, and access to resources provided by the funded project. With 63% of NEH's funding from 2018-2023 in Appalachia being awarded to higher education institutions, there is a question of whether funding is being used for independent research projects rather than museums, historical societies, and other organizations that promote the humanities. Do these grants create jobs in locations of the region with high unemployment and poverty rates? Do they specifically focus on history and the arts of the region, or external projects unrelated to Appalachia? These questions are not implying that the projects funded are unimportant. Instead, they are a probe into the amount of funding going towards preserving Appalachian culture and furthering the region's economic progress.

These visualizations of NEH funding also posit an important question for future analyses: how do we better visualize our funding allocations? Most data from NEH shows spiky trends solely based on when a grant was awarded, rather than smoother trends over time for longer-term grants (i.e., 5-year allocations, recurring applications for the same institution, etc.). This project opens up such a discussion of how NEH should collect data on the temporal aspect of grant decisions and allocations for better visualization in internal and external reports.

Additionally, while some think of Appalachia as fully and wholly rural, the truth is that there are highly populated cities to which a majority of NEH funding is attributed. For example, this analysis shows a large amount of money awarded in Pennsylvania. This might lead to the conclusion that the humanities are thriving in the state which is predominantly rural and farm industries. The reality is the majority of the funds are going towards four-year universities, such as University of Pittsburgh and Pennsylvania State University, both of which are located in highly populated, urban areas. It is nearly impossible to unravel the true nature of each individual project receiving NEH funding and if it is directly benefiting Appalachian culture. Even so, this analysis provides a first step into an examination of NEH funding to benefit a deep and complex cultural and historical region. Moving forward, divisions within the agency could prioritize applicants from rural communities within the region, rather than the larger cities (i.e., Pittsburgh, Knoxville, etc.).

Appendices

Appendix A – Appalachian Counties Included in Analysis

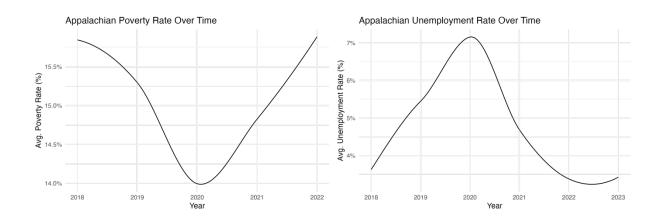
- *Alabama (37 counties):* Bibb, Blount, Calhoun, Chambers, Cherokee, Chilton, Clay, Cleburne, Colbert, Coosa, Cullman, De Kalb, Elmore, Etowah, Fayette, Franklin, Hale, Jackson, Jefferson, Lamar, Lauderdale, Lawrence, Limestone, Macon, Madison, Marion, Marshall, Morgan, Pickens, Randolph, St. Clair, Shelby, Talladega, Tallapoosa, Tuscaloosa, Walker, and Winston
- *Georgia (37 counties):* Banks, Barrow, Bartow, Carroll, Catoosa, Chattooga, Cherokee, Dade, Dawson, Douglas, Elbert, Fannin, Floyd, Forsyth, Franklin, Gilmer, Gordon, Gwinnett, Habersham, Hall, Haralson, Hart, Heard, Jackson, Lumpkin, Madison, Murray, Paulding, Pickens, Polk, Rabun, Stephens, Towns, Union, Walker, White, and Whitfield
- *Kentucky (54 counties)*: Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe
- Maryland (3 counties): Allegany, Garrett, and Washington
- *Mississippi (24 counties)*: Alcorn, Benton, Calhoun, Chickasaw, Choctaw, Clay, Itawamba, Kemper, Lee, Lowndes, Marshall, Monroe, Montgomery, Noxubee, Oktibbeha, Panola, Pontotoc, Prentiss, Tippah, Tishomingo, Union, Webster, Winston, and Yalobusha
- *New York (14 counties)*: Allegany, Broome, Cattaraugus, Chautauqua, Chemung, Chenango, Cortland, Delaware, Otsego, Schoharie, Schuyler, Steuben, Tioga, and Tompkins
- North Carolina (31 counties): Alexander, Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Catawba, Cherokee, Clay, Cleveland, Davie, Forsyth, Graham, Haywood, Henderson, Jackson, McDowell, Macon, Madison, Mitchell, Polk, Rutherford, Stokes, Surry, Swain, Transylvania, Watauga, Wilkes, Yadkin, and Yancey
- *Ohio (32 counties)*: Adams, Ashtabula, Athens, Belmont, Brown, Carroll, Clermont, Columbiana, Coshocton, Gallia, Guernsey, Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Lawrence, Mahoning, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Scioto, Trumbull, Tuscarawas, Vinton, and Washington
- *Pennsylvania (52 counties)*: Allegheny, Armstrong, Beaver, Bedford, Blair, Bradford, Butler, Cambria, Cameron, Carbon, Centre, Clarion, Clearfield, Clinton, Columbia, Crawford, Elk, Erie, Fayette, Forest, Fulton, Greene, Huntingdon, Indiana, Jefferson, Juniata, Lackawanna, Lawrence, Luzerne, Lycoming, McKean, Mercer, Mifflin, Monroe, Montour, Northumberland, Perry, Pike, Potter, Schuylkill, Snyder, Somerset, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Washington, Wayne, Westmoreland, and Wyoming
- *South Carolina (7 counties)*: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, and Union
- *Tennessee (52 counties)*: Anderson, Bledsoe, Blount, Bradley, Campbell, Cannon, Carter, Claiborne, Clay, Cocke, Coffee, Cumberland, De Kalb, Fentress, Franklin, Grainger, Greene, Grundy, Hamblen, Hamilton, Hancock, Hawkins, Jackson, Jefferson, Johnson, Knox, Lawrence, Lewis, Loudon, McMinn, Macon, Marion, Meigs, Monroe, Morgan, Overton, Pickett, Polk, Putnam, Rhea, Roane, Scott, Sequatchie, Sevier, Smith, Sullivan, Unicoi, Union, Van Buren, Warren, Washington, and White

- *Virginia (25 counties)*: Alleghany, Bath, Bland, Botetourt, Buchanan, Carroll, Craig, Dickenson, Floyd, Giles, Grayson, Henry, Highland, Lee, Montgomery, Patrick, Pulaski, Rockbridge, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe
 - The following independent cities in Virginia are also within the Appalachian Region and are merged with an adjacent or surrounding county for the purposes of data analysis and grant management: Bristol (Washington County), Buena Vista (Rockbridge County), Covington (Alleghany County), Galax (Carroll County), Lexington (Rockbridge County), Martinsville (Henry County), Norton (Wise County), and Radford (Montgomery County)
- West Virginia (55 counties): Barbour, Berkeley, Boone, Braxton, Brooke, Cabell, Calhoun, Clay, Doddridge, Fayette, Gilmer, Grant, Greenbrier, Hampshire, Hancock, Hardy, Harrison, Jackson, Jefferson, Kanawha, Lewis, Lincoln, Logan, Marion, Marshall, Mason, McDowell, Mercer, Mineral, Mingo, Monongalia, Monroe, Morgan, Nicholas, Ohio, Pendleton, Pleasants, Pocahontas, Preston, Putnam, Raleigh, Randolph, Ritchie, Roane, Summers, Taylor, Tucker, Tyler, Upshur, Wayne, Webster, Wetzel, Wirt, Wood, and Wyoming

Appendix B - Static Visualizations: Appalachian Map and Summary Statistic Tables

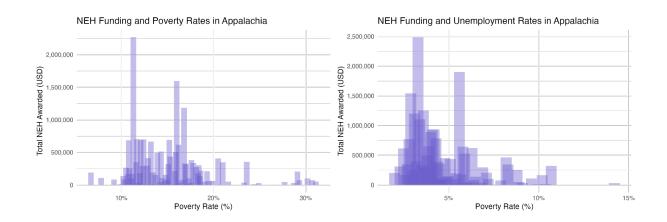
Appendix B.1 - Poverty and Unemployment Rates in Appalachia

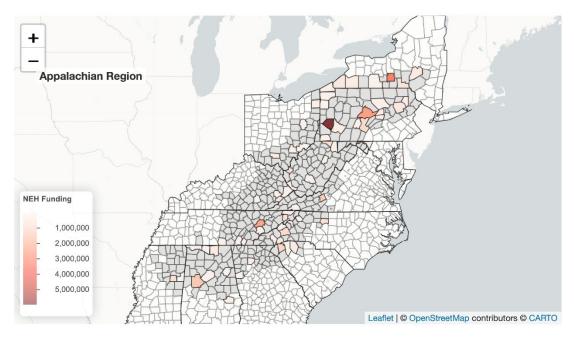
Figure B.1a depicts the average poverty rate in the region from 2018-2022, reported by the Small Area Income and Poverty Estimates (SAIPE) from the US Census Bureau (<u>US Bureau of Labor Statistics, 2024</u>). Additionally, **Figure B.1b** depicts the average unemployment rate in the region from 2018-2023, reported by the Local Area Unemployment Statistics (LAUS) from the Bureau of Labor Statistics (<u>US Census Bureau</u>, <u>2023</u>). Interestingly, poverty and unemployment are inverse of one another. At the onset of the COVID-19 pandemic in 2020, when unemployment was the highest (approx. 7.5%), the average poverty rate was at its lowest (approx. 14%). This temporary dip in poverty rates, while still having high unemployment, could be due to the support of COVID-19 relief packages (stipends, etc.) helping those previously below the poverty line.



Appendix B.2 - NEH Funding and Economic Trends in Appalachia

Figures B.2a and B.2b depict the distribution of (a) poverty and (b) unemployment rates for each individual county in the region for different amounts of NEH funding. From these basic bar charts, NEH funding was awarded mostly when poverty rates were between 10 and 20% across the entire region. Additionally, funding was most prevalent in areas where unemployment rates were under about 6%. These preliminary analyses suggest that NEH funding related to CARES and ARP acts may have assisted those in Appalachia suffering from poverty and unemployment, especially during and after the pandemic.





Appendix B.3 - Appalachian Counties with NEH Funding (Sum from 2018-2023)

Larger amounts of funding were awarded to areas with larger cities. Areas of note include:

- Pittsburgh, PA (Allegheny) to Carnegie Mellon University or University of Pittsburgh
- State College, PA (Centre) to Pennsylvania State University, University Park
- Knoxville, TN (Knox) to University of Tennessee, Knoxville
- Ithaca, NY (Tompkins) to Cornell University

Appendix B.4 - Summary Statistics of NEH Awards

Award Overview

Total Grants	Total Awarded	Average	Max
310	\$28,957,403	\$93,410.98	\$571,975

Appendix B.5 - Summary Statistics of Disciplines Funded

Discipline	Count	Amount Awarded
History	138	\$12,826,333
Interdisciplinary	36	\$5,285,844
Arts	40	\$3,440,127
Area Studies	27	\$2,279,558
Literature	41	\$2,161,488
Humanities	8	\$1,145,788
Social Science	9	\$1,012,318
Language	8	\$773,947
Unspecified	3	\$32,000

Disciplines Funded

Appendix B.6 - Summary Statistics of Divisions Funded

Divisions Funded

Division	Count	Amount Awarded
Education Programs	52	\$6,496,216
Research Programs	94	\$5,983,335
Challenge Programs	14	\$4,488,391
Preservation and Access	59	\$4,065,653
Public Programs	27	\$3,209,832
Digital Humanities	51	\$3,029,479
Agency-wide Projects	13	\$1,684,497

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Appendix	D./ -	Summarv	Statistics	OIU	Organizations	Funded
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1	Organization		· · · · · · · · · · · · · · · · · · ·
1		\$ Count	Amount Awarded
	Public Library	11	\$1,576,371
2	Publishing	15	\$1,544,961
3	Natural History Museum	4	\$763,484
4	Non-Profit Educational Center	9	\$667,038
5	History Museum	10	\$597,044
6	Art Museum	8	\$560,095
7	Arts-Related Organization	2	\$457,503
8	Nature Center/Botanical Garden/Aboretum	1	\$450,000
9	National Organization	2	\$419,109
10	Museum	1	\$379,410

Appendix B.8 - Summary Statistics of Higher Education Institutions

HEI	Count	Amount Awarded
Research University (Very High)	112	\$9,381,853
Research University (High)	43	\$4,087,202
Baccalaureate Colleges	38	\$3,000,391
Master's (Large)	15	\$957,620
Master's (Medium)	6	\$408,362
Doctoral/Research University	2	\$274,841
Master's (Small)	2	\$206,358
Associate's - Public	2	\$100,240

HEIs Funded

Appendix B.9 - Summary Statistics of HBCUs

HBCUs Funded		
Count	Amount Awarded	
5	\$497,101	

References

- Appalachian Regional Commission. 2022. "Appalachian Counties Served by ARC." *Appalachian Regional Commission*. https://www.arc.gov/appalachian-counties-served-by-arc/.
- Dufaure, Sarah. 2016. "The 'Appalachian Renaissance': An Ecocritical Form of Cultural Immobility?" Revue française d'études américaines 149(4): 88–99. doi:<u>10.3917/rfea.149.0088</u>.
- National Center for Education Statistics (NCES). 2023. "Integrated Postsecondary Education Data System (IPEDS). <u>https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx?</u>

gotoReportId=7&fromIpeds=true&sid=aa7e6b22-7bde-4560-b773-08d66a1c3568&rtid=7

- "NEH Data.Gov." 2024. https://catalog.data.gov/organization/neh-gov.
- Stewart, Carolyn. 2022. "Road Trip Through Appalachia." HUMANITIES 43(2). https://www.neh.gov/article/road-trip-through-appalachia.
- University of Tennessee Press. (2000). *The Encyclopedia of Appalachia*. Encyclopedia of Appalachia. <u>http://web.archive.org/web/20160423202445/http://encyclopediaofappalachia.com/</u>
- US Bureau of Labor Statistics. 2024. "Local Area Unemployment Statistics (LAUS)." https://www.bls.gov/lau/tables.htm.
- US Census Bureau. 2023. "Small Area Income and Poverty Estimates (SAIPE)." https://www.census.gov/data-tools/demo/saipe.