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THE HEART OF APPALACHIA IS ON LIFE SUPPORT: HOW WEST VIRGINIA CAN REVIVE ITS ECONOMY IN A POST-COAL ERA

Haley Nicole Usenick*

INTRODUCTION

“We love clean, beautiful West Virginia coal.”

—President Donald Trump, 2018 West Virginia Campaign rally¹

“Coal fired our nation and deserves its place at the table. Simply put, we cannot do without coal in the foreseeable future.”

—West Virginia Governor Jim Justice, 2018 Press Release²

West Virginia’s history is a story of coal. As the sole state to lie wholly within Appalachia, an area known for its rural landscape and coal production,³ West Virginia’s homogenous economy⁴ has become a cautionary tale for the collapse of the coal industry.⁵ In 2018, the coal industry saw a record number of coal power

* J.D., 2020, University of Pittsburgh School of Law; B.A. in Criminology, 2017, West Virginia University.

¹ Linda Qiu & John Schwartz, *Trump’s False Claims About Coal, the Environment and West Virginia*, N.Y. TIMES (Aug. 21, 2018), <https://www.nytimes.com/2018/08/21/us/politics/trump-fact-check-west-virginia-rally.html>.

² Press Release, Office of the Governor, Justice Coal Plan Moves Forward (June 1, 2018), <https://governor.wv.gov/News/press-releases/2018/Pages/Justice-coal-plan-moves-forward.aspx>.

³ *The Appalachian Region*, APPALACHIAN REG’L COMM’N, https://www.arc.gov/appalachian_region/theappalachianregion.asp (last visited Apr. 28, 2020).

⁴ India Amos, *I Want to Return to My Home State. But West Virginia Doesn’t Want Me.*, WASH. POST (Mar. 7, 2018), https://www.washingtonpost.com/news/posteverything/wp/2018/03/07/i-want-to-return-to-my-home-state-but-west-virginia-doesnt-want-me/?noredirect=on&utm_term=.190d668cc91b.

⁵ See Dave Mistich, *Here’s Why Central Appalachia’s Coal Industry Is Dying*, W. VA. PUB. BROAD. (Nov. 6, 2013), <http://www.wvpublic.org/webclip/here-s-why-central-appalachia-s-coal-industry->

plant closures which caused a loss of generation capacity, almost doubling that seen in 2017.⁶ At the end of 2018, the coal industry reported the lowest record of coal consumption in thirty-nine years.⁷ The effects of the diminished coal industry are glaringly visible in West Virginia, a state whose economic identity has been synonymous with coal production for over a century.⁸ West Virginia produces roughly half the amount of coal that it did in 2008, and mining employment within the state has decreased 40% within the past five years, with certain parts of the state losing as many as 70% of its coal mining jobs.⁹

West Virginia has suffered alongside the dying coal industry—the Appalachian state has consistently landed at the bottom of published economic lists.¹⁰ In fact, for the past four years, West Virginia has ranked last or next to last as the best state for business,¹¹ and in 2018 West Virginia held the title of “poorest state in the country.”¹² Reports on West Virginia’s population also show a bleak trend. With a population of over 1.8 million people, the state has a poverty rate of 19.1%.¹³ Notably, 34% of West Virginians live in an economically distressed ZIP code, and the most distressed

dying#stream/0; Brad Plumer, *Here’s Why Central Appalachia’s Coal Industry Is Dying*, WASH. POST (Nov. 4, 2013), https://www.washingtonpost.com/news/wonk/wp/2013/11/04/heres-why-central-appalachias-coal-industry-is-dying/?utm_term=.afb807a089aa.

⁶ See Stacy MacIntyre & Scott Jell, *U.S. Coal Consumption in 2018 Expected to Be the Lowest in 39 Years*, U.S. ENERGY INFO. ADMIN. (Dec. 4, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=37692>.

⁷ *Id.*

⁸ Kiley Kroth & Katie Valentine, *Inside West Virginia’s Struggle to Break Its Coal Addiction*, THINK PROGRESS (Mar. 11, 2014), <https://thinkprogress.org/inside-west-virginias-struggle-to-break-its-coal-addiction-80ce52ea09be/>.

⁹ Scott Cohn, *In an Economic Death Spiral: West Virginia is America’s Worst State for Business in 2017*, CNBC, <https://www.cnbc.com/2017/07/11/west-virginia-americas-worst-state-for-business-in-2017.html> (last updated July 12, 2017). See generally BRIAN LEGO & JOHN DESKINS, BUREAU OF BUS. & ECON. RESEARCH, COAL PRODUCTION IN WEST VIRGINIA: 2017–2040 (2017), https://researchrepository.wvu.edu/cgi/viewcontent.cgi?article=1000&context=bureau_be.

¹⁰ *West Virginia*, FORBES, <https://www.forbes.com/places/wv/> (last updated Nov. 2018); Taylor Long, *West Virginia Ranked Poorest State in Country*, 13WOWK, <https://www.wowktv.com/news/west-virginia/west-virginia-ranked-poorest-state-in-country/> (last updated Oct. 11, 2018).

¹¹ *West Virginia*, *supra* note 10.

¹² Long, *supra* note 10.

¹³ *Id.*

conditions are seen in southern West Virginia—a region heavily impacted by cycles of the coal industry.¹⁴

Currently, the state is at a stalemate—unable to return to its once-robust coal-centric economy but unwilling to let it go.¹⁵ This Note explains why West Virginia is unable to sustain its coal-dependent economy with any longevity by comparing the Appalachian state to two cities that were largely dependent on a single industry: Pittsburgh and Detroit. Specifically, this Note argues that in order for West Virginia to avoid economic collapse, the state should model its diversification and revitalization after Pittsburgh’s post-steel transformation.

Section I of this Note provides an overview of the region’s relationship with coal and the cultural values West Virginia associates with the coal industry. Section II of this Note describes why it is not feasible for West Virginia to bring back coal long-term. Section III outlines two paths forward for West Virginia by comparing Pittsburgh’s success in revitalizing its economy post-steel to Detroit’s economic crisis due to its continued dependence on the auto industry. Lastly, Section IV concludes with proposed legislative solutions for how West Virginia can move forward from coal and follow a revitalization model similar to Pittsburgh, but one specific to the region’s existing diverse values and landscape.

I. AN OVERVIEW OF CENTRAL APPALACHIA’S HISTORY WITH COAL

A. *The Height of Coal*

Coal has done a lot for the Appalachian state. Although mining occurred throughout the region after coal’s discovery in Boone County, West Virginia in 1742,¹⁶ extensive mining did not occur until the mid-1800s.¹⁷ By 1840, West Virginia was producing a yearly average of 300,000 tons of coal.¹⁸ The Appalachian state’s coal production began its steady upward climb in the aftermath of the Civil

¹⁴ Alex Thomas, *West Virginia Struggles to Match National Economic Growth Trends*, W. VA. METRO NEWS (Sept. 10, 2018), <http://wvmetronews.com/2018/09/10/west-virginia-struggles-to-match-national-economic-growth-trends/>.

¹⁵ MacIntyre & Jell, *supra* note 6.

¹⁶ Stuart McGehee, *A History of Coal in West Virginia*, FRIENDS OF COAL, <https://www.friendsofcoal.org/education/a-history-of-coal-in-west-virginia.html> (last visited Dec. 21, 2018).

¹⁷ *History of West Virginia Mineral Industries—Coal*, W. VA. GEOLOGICAL & ECON. SURVEY, <http://www.wvgs.wvnet.edu/www/geology/geoldvco.htm> (last updated June 20, 2017).

¹⁸ *Id.*

War in order to meet a growing coal demand.¹⁹ By 1880, there were extensive operations in eight West Virginia counties to keep pace with the expanding industry,²⁰ with an estimated 3,726 miners employed.²¹ Mining methods and laws transformed to meet the rapid growth of the industry and by 1890, electric coal cutting, loading, and hauling machines were utilized to increase efficiency and production.²² In 1900, over 22,647,207 tons of coal were produced and the state had 29,017 persons employed in the coal industry.²³ Coal production reached its first peak in 1927 when production totaled 146,088,121 tons, with an estimated 119,618 residents employed in the coal industry.²⁴ West Virginia saw its second peak in 1947 when it produced 173,653,816 tons of coal.²⁵ The third and final peak in production was in 1997 when the state produced 181,914,000 tons of coal.²⁶

B. *Coal Production Diminishes as the Industry Dies*

Since 1997, coal production has steadily declined.²⁷ In 2009, approximately 21,671 West Virginians were employed in coal mines.²⁸ By 2017, a mere 14,000 were employed.²⁹ West Virginia has seen around a 40% drop in its coal workforce

¹⁹ James T. Laing, *The Early Development of the Coal Industry in the Western Counties of Virginia, 1800–1865*, 27 W. VA. ARCHIVES & HIST. 144 (1966).

²⁰ *History of West Virginia Mineral Industries—Coal*, *supra* note 17.

²¹ *Production of Coal and Coke in West Virginia 1863–2012*, W. VA. OFFICE OF MINERS' HEALTH, SAFETY, & TRAINING, <https://minesafety.wv.gov/historicprod.htm> (last visited May 27, 2020).

²² *History of West Virginia Mineral Industries—Coal*, *supra* note 17.

²³ *Production of Coal and Coke in West Virginia 1863–2012*, *supra* note 21. For context, in 1889 West Virginia's coal production was 6,232 per thousand of short tons; Iowa was 4,095 per thousand of short tons; Kentucky's coal production was 2,400 per thousand of tons; Tennessee was 1,926 per thousand of short tons. U.S. BUREAU OF THE CENSUS, *Chapter III. Statistics for Mines and Quarries, By State, in THIRTEENTH CENSUS OF THE UNITED STATES, TAKEN IN THE YEAR 1910*, 187 at tbl.4 (1913).

²⁴ *Production of Coal and Coke in West Virginia 1863–2012*, *supra* note 21.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *See id.*

²⁸ Ken Ward, Jr., *The Coal Industry Extracted a Steep Price From West Virginia*, CHARLESTON GAZETTE-MAIL (Apr. 27, 2017), <https://www.propublica.org/article/west-virginia-coal-industry-rise-of-natural-gas>.

²⁹ *Id.*

since 2008.³⁰ A study conducted by West Virginia University's Bureau of Business and Economic Research showed that coal mining output in 2016 totaled 80 million short tons, less than half of the 158 million short tons logged in 2008.³¹ As a result, the parts of the Appalachian state that once produced the most coal have become the poorest in the region.³²

The decrease in coal production can be attributed to several factors. Coal jobs began to deplete as new machines were developed that were able to produce twice the amount of coal with half the workforce.³³ Additionally, years of mining production had gradually drained the once-rich seams in the Central Appalachian Basin and left in its place thinner coal, which is more laborious to extract.³⁴

However, the rise of natural gas is arguably the most detrimental factor for the coal industry.³⁵ Natural gas has become coal's biggest competitor as it is cheaper and more readily extracted through fracking.³⁶ A report from the Institute for Energy Economics and Financial Analysis detailed how competition between natural gas (generally, a cheaper alternative) and coal has caused changes in the energy market.³⁷ The energy market has shifted in favor of natural gas due to its low prices in lieu of the increased cost of coal-generated power.³⁸ Environmental concerns also impacted this market shift.³⁹ Burning natural gas as opposed to coal results in a reduction of

³⁰ *Id.*

³¹ LEGO & DESKINS, *supra* note 9, at 1.

³² Ward, *supra* note 28.

³³ James A. Haught, *A Short History of Mining—and Its Decline—in West Virginia*, THE REGISTER-HERALD (Mar. 30, 2017), https://www.register-herald.com/opinion/columns/a-short-history-of-mining---and-its/article_4c968cfd-8d8b-51c7-bccb-77e186ea61f7.html.

³⁴ *Id.*

³⁵ See Ward, *supra* note 28; Mark Perry, *The Real Cause of Coal's Collapse*, U.S. NEWS (Mar. 9, 2017), <https://www.usnews.com/opinion/economic-intelligence/articles/2017-03-09/abundant-cheap-natural-gas-is-the-real-reason-for-the-demise-of-coal>.

³⁶ Perry, *supra* note 35.

³⁷ See generally DAVID SCHLISSEL ET AL., INST. FOR ENERGY ECON. & FIN. ANALYSIS, U.S. COAL: MORE MARKET EROSION IS ON THE WAY (2018), <https://ieefa.org/wp-content/uploads/2018/02/U.S.-Coal-More-Market-Erosion--February-2018.pdf>.

³⁸ *The Future of Natural Gas*, UNION OF CONCERNED SCIENTISTS, <https://www.ucsusa.org/clean-energy/coal-and-other-fossil-fuels/the-future-of-natural-gas#.XEtyu2yWzA0> (last updated Apr. 3, 2015).

³⁹ See *id.*

air pollution, which can be seen as a more environmentally-friendly alternative.⁴⁰ Further, natural gas offers a more efficient way to introduce renewable resources like wind and solar powered plants by providing the energy market more flexibility.⁴¹

Thus, the coal industry had already diminished greatly when in 2015 it took another hit due to the “War on Coal.”⁴² President Barack Obama’s Administration created a rule dubbed the “Clean Power Plan” that limited mercury and carbon-dioxide emissions from coal-fired power plants.⁴³ The coal industry and its allies coined the phrase “War on Coal” to describe the restriction.⁴⁴ Proponents of the “War on Coal” believe the 2015 rule was an attempt to make coal unprofitable.⁴⁵ In contrast, the Obama Administration contended that the Clean Power Plan was a response to climate change and an effort to clean up pollution.⁴⁶

Regardless of motive, the coal industry was affected, as most of the country’s pollution is emitted from coal power plants.⁴⁷ Coal is the main source of mercury and other toxins that pollute the air.⁴⁸ As a result, existing coal plants faced increased costs in order to become environmentally compliant.⁴⁹ This allowed natural gas, a cheaper alternative, to take up a larger share of the energy market.⁵⁰ Following the implementation of the Clean Power Plan, many existing coal plants made plans to

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² See Bryan Leyland & Tom Harris, *When Clean, Affordable Fuel Isn’t Good Enough for Gore*, WASH. TIMES (Dec. 20, 2017), <https://www.washingtontimes.com/news/2017/dec/20/the-war-on-coal-is-a-war-on-the-environment-and-th/>.

⁴³ *Id.* (stating the 2015 rule was entitled “Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Generating Units”); Dana Nuccitelli, *The War on Coal is Over: Coal Lost*, THE GUARDIAN (Oct. 16, 2017), <https://www.theguardian.com/environment/climate-consensus-97-per-cent/2017/oct/16/the-war-on-coal-is-over-coal-lost>.

⁴⁴ Erica Peterson, *If There’s a ‘War on Coal,’ It Started Long Before President Obama*, 89.3 WFPL (Aug. 7, 2014), <https://wfpl.org/if-theres-war-coal-it-started-long-president-obama/>.

⁴⁵ Michael Grunward, *New Carbon Rules the Next Step in Obama’s War on Coal*, TIME (June 1, 2014), <https://time.com/2806697/obama-epa-coal-carbon/>.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*

retire or convert to natural gas, and few new coal plants were built as they had become more expensive than energy alternatives.⁵¹

The decrease in coal production caused a loss in workforce evident in individual communities and statewide. For instance, during the height of coal production, McDowell County, West Virginia, a large coal contributor, had a population near 100,000.⁵² In 2017, the county's population totaled fewer than 20,000 residents.⁵³ West Virginia's population is also declining on the whole; it has consistently lost 0.1% of its population every year over the past decade.⁵⁴ A recent study found West Virginia is losing its population faster than any other state.⁵⁵

In addition to a diminishing population, the Appalachian state is also experiencing high poverty and unemployment rates.⁵⁶ In 2017, an estimated 336,301 residents—totaling 19.1% of the state's population—received an income below the poverty level.⁵⁷ With a poverty rate 5.7% higher than the national average, West Virginia ranked fourth in states experiencing the highest levels of poverty.⁵⁸ Similarly, West Virginia holds the fourth place rank among states with a high level

⁵¹ *Id.*

⁵² Haught, *supra* note 33.

⁵³ *Id.*

⁵⁴ Matt McKillop & Daniel Newman, *Years of Slower Population Growth Persisted in 2017*, PEW CHARITABLE TRUSTS (June 20, 2018), <https://www.pewtrusts.org/en/research-and-analysis/articles/2018/06/20/years-of-slower-population-growth-persisted-in-2017>.

⁵⁵ *Id.*

⁵⁶ Taylor Stuck, *West Virginia's Poverty Rate Increases to 19.1 Percent*, HERALD-DISPATCH (Sept. 14, 2018), http://www.herald-dispatch.com/news/west-virginia-s-poverty-rate-increases-to-percent/article_e6d75fd2-abb1-5e9f-bc55-dc45a3673b94.html; *West Virginia 2017*, TALK POVERTY, <https://talkpoverty.org/state-year-report/west-virginia-2017-report/> (last visited Apr. 26, 2020) (reporting the poverty line is \$24,860 for a family of four).

⁵⁷ *West Virginia 2017*, *supra* note 56 (finding the poverty level in 2017 had increased 1.2% from the previous year; in 2016, 17.9% of West Virginians fell below the poverty line).

⁵⁸ *See* Stuck, *supra* note 56.

of unemployment.⁵⁹ Compared to the national average of 3.9%, 5.1% of West Virginias were unemployed at the end of 2018.⁶⁰

In the state's coalfields, the unemployment rate is even higher. In 2017, the unemployment rates for southern West Virginia counties were as follows: 10.2% in McDowell County, 10.3% in Mingo County, 8.4% in Logan County, and 8% in Wyoming County.⁶¹ Economists at West Virginia University claim all four coalfield counties are in a great depression,⁶² and fifteen West Virginia counties in total have recently been classified as "distressed" by the Appalachian Regional Commission ("ARC").⁶³ The ARC Communications Director, Wendy Wasserman, explained that the increase in distressed counties can be attributed in part to West Virginia's dependence on the diminishing coal industry.⁶⁴ Executive Director of the Region VII Planning and Development Council, Shane Whitehair, oversees two distressed counties and proclaimed that they are still at the mercy of the energy sector.⁶⁵ Whitehair stated, "[w]e kind of live and breathe by the energy sector."⁶⁶ Even West Virginia Governor Jim Justice acknowledged West Virginia's bleak economic

⁵⁹ BUREAU OF LABOR STATISTICS, REGIONAL AND STATE EMPLOYMENT AND UNEMPLOYMENT: JULY 2008 (2008); BUREAU OF LABOR STATISTICS, STATE EMPLOYMENT AND UNEMPLOYMENT: DECEMBER 2018 (2019) (reporting a 5.1% unemployment rate as of December 2018, compared to a 4.5% unemployment rate in July 2008 when the state had a higher volume of coal production).

⁶⁰ *Official Unemployment Rate Was 3.9 Percent in December 2018; U-6 Was 7.6 Percent*, BUREAU OF LABOR STATISTICS (Jan. 9, 2019), <https://www.bls.gov/opub/ted/2019/official-unemployment-rate-was-3-point-9-percent-in-december-2018-u-6-was-7-point-6-percent.htm>.

⁶¹ Kyle Gibson, *For Coalfield Counties, Jobless Rates Remain High as Statewide Total Dips*, FOX 11 NEWS (Apr. 20, 2017), <https://wvah.com/news/local/for-coalfield-counties-jobless-rates-remain-high-as-statewide-total-dips>.

⁶² Christopher Williams, *WVU Economists Say Six West Virginia Counties in Great Depression*, FOX 11 NEWS (Aug. 30, 2016), <https://wchstv.com/news/local/wvu-economists-say-six-west-virginia-counties-in-great-depression>.

⁶³ *ARC-Designated Distressed Counties, Fiscal Year 2019*, APPALACHIAN REG'L COMM'N, https://www.arc.gov/program_areas/ARCDesignatedDistressedCountiesFiscalYear2019.asp (last visited Jan. 25, 2019) (defining "distressed" as "the Region's poorest counties" identified on "the basis of low per capita income and high rates of poverty and unemployment").

⁶⁴ Max Garland, *More WV Counties Economically Distressed than Last Year, Commission Says*, GAZETTE-MAIL (Sept. 2, 2018), https://www.wvgazette.com/business/more-wv-counties-economically-distressed-than-last-year-commission-says/article_6ee9ba55-ba63-5213-bbb8-c04fb7566de2.html.

⁶⁵ *Id.*

⁶⁶ *Id.*

outlook in 2013—prior to his election—stating, “[y]ou may be witnessing the death of the coal industry.”⁶⁷

C. *Coal’s Entrenchment in West Virginia History and Values*

Although coal production is on a massive decline, it still has a stranglehold on the politics of the Appalachian state.⁶⁸ Moving forward from coal is difficult for a state like West Virginia whose state leaders remain loyal to the coal industry.⁶⁹ West Virginia Governor Jim Justice is a loyal supporter of the coal industry who continues to work alongside President Trump to return West Virginia’s coal industry to its “former glory.”⁷⁰ United States House Representative David B. McKinley believes coal must maintain a presence in the energy industry to avoid leaving West Virginia vulnerable.⁷¹ Senator Joe Manchin has “spoken out against the Clean Power Plan since day one” by calling it a “failed policy that hurt West Virginia.”⁷²

Furthermore, West Virginia has a culture of coal dependence; coal is entrenched within West Virginia’s history and values. The West Virginia Extension agents conducted a cultural study and found residents in “coal country”⁷³ shared a common value of traditionalism or heritage.⁷⁴ The study defined traditionalism as respect for “standards followed and revered by a people continuously from

⁶⁷ See Haught, *supra* note 33.

⁶⁸ See Kroth & Valentine, *supra* note 8.

⁶⁹ *Id.*

⁷⁰ Cristiano Lima, *Trump: Praise for Justice and Coal*, POLITICO (Aug. 3, 2017), <https://www.politico.com/story/2017/08/03/trump-praises-west-virginia-governor-coal-241313>.

⁷¹ Jessica Broverman, *U.S. Rep. David McKinley Addresses Wheeling Rotary*, INTELLIGENCER (Oct. 18, 2017), <http://www.theintelligencer.net/news/top-headlines/2017/10/u-s-rep-david-mckinley-addresses-wheeling-rotary/>.

⁷² *Manchin Applauds New Trump Energy Policy, and Help for Coal Miners*, MANCHIN FOR WEST VIRGINIA, <https://joemanchinwv.com/manchin-applauds-new-trump-energy-policy-and-help-for-coal-miners/> (last visited Dec. 1, 2018).

⁷³ Ken Silverstein, *The Great American Con: Why Giving False Hope to Coal Country Is the Cruellest Hoax of All*, FORBES (Aug. 14, 2018), <https://www.forbes.com/sites/kensilverstein/2018/08/14/the-great-american-con-why-giving-false-hope-to-coal-country-is-the-cruellest-hoax-of-all/#331aba91639d>.

⁷⁴ BILL BARKER, APPALACHIAN REG’L MINISTRY, A STUDY OF WEST VIRGINIA VALUES AND CULTURE 6–7 (2004), <https://cjhenderson.co/ACulturalViewofWVShort.pdf>.

generation to generation.”⁷⁵ West Virginians have been called “yesterday’s people” because they are loyal to tradition and resistant to change.⁷⁶

Many West Virginian families share a history rich with coal and generations of coal miners.⁷⁷ A famous memoir,⁷⁸ *Rocket Boys*, detailed the life of Homer Hickam, a West Virginia native and former miner.⁷⁹ Hickam, like many West Virginians, comes from a coal mining family and knows firsthand the consequences of it—his father lost sight in one of his eyes while rescuing trapped coal miners and his grandfather lost both of his legs in West Virginia’s Coalwood mine.⁸⁰ When describing coal miners, Hickam says, “they are typically very proud of who they are. They’re the type of folks who stand up for what they believe. They consider the family holy.”⁸¹

Coal mining is not just an occupation for West Virginians; it is a way of life. James Van Nostrand, a law professor at West Virginia University, expands on this by saying, “[i]t’s just a source of great pride in West Virginia that the United States [was] industrialized on the backs of the coal miners.”⁸² Even in the face of a diminishing coal industry, West Virginia has consistently voted against its own interests and elected representatives who feel favorably toward the coal industry. The Appalachian state has not “vot[ed] to preserve what they have” but instead have “vot[ed] on behalf of a story their region tells about itself, a story that hasn’t been true for a generation or more.”⁸³ Unsurprisingly, even in the face of economic collapse, West Virginia is struggling to let go of its heritage.

⁷⁵ *Id.*

⁷⁶ See generally JACK E. WELLER, *YESTERDAY’S PEOPLE: LIFE IN CONTEMPORARY APPALACHIA* (1995).

⁷⁷ See McGehee, *supra* note 16.

⁷⁸ Hickam’s memoir about growing up in West Virginia coal country was made into the movie “October Sky” in 1999.

⁷⁹ See generally HOMER HICKAM, *ROCKET BOYS* (1998).

⁸⁰ *Former Miner Explains Culture of Mining*, NPR (Apr. 7, 2010), <https://www.npr.org/templates/story/story.php?storyId=125676950>.

⁸¹ *Id.*

⁸² Laurent Belsie, *West Virginia’s Coal Culture Runs Deep. It Is Also Evolving*, CHRISTIAN SCI. MONITOR (Feb. 6, 2020), <https://www.csmonitor.com/Business/2020/0206/West-Virginia-s-coal-culture-runs-deep.-It-is-also-evolving>.

⁸³ Paul Krugman, *Coal Country Is a State of Mind*, N.Y. TIMES (Mar. 31, 2017), <https://www.nytimes.com/2017/03/31/opinion/coal-country-is-a-state-of-mind.html>.

II. IT IS UNSUSTAINABLE FOR APPALACHIA TO “BRING BACK COAL”

A. *Coal Production Seemingly Reemerges*

The year 2016 breathed new life into the coal industry. After the 2016 election, President Trump’s administration gave West Virginia newfound hope for the coal industry’s return.⁸⁴ As part of his presidential campaign, now-President Trump focused on his loyalty and support for coal miners saying, “[t]heir jobs have been taken away, and we’re going to bring them back.”⁸⁵ President Trump also promised to end the “War on Coal” during his campaign.⁸⁶ West Virginia had the highest percentage of voters that supported Donald Trump in the 2016 election.⁸⁷

In 2017, President Trump moved to repeal the Obama Administration’s Clean Power Plan and proposed an alternative in its place.⁸⁸ The Trump Administration presented the Affordable Clean Energy Rule, which gives states more authority to regulate coal power plant emissions.⁸⁹ In a White House statement, President Trump declared, “[w]e’re ending the intrusive EPA regulations that kill jobs.”⁹⁰ Recently, David McKinley, a United States congressman from West Virginia and chairman of the Congressional Coal Caucus, declared that President Trump had “ended the war on coal.”⁹¹

⁸⁴ Leigh Paterson & Reid Frazier, *Coal Country Picked Trump. Now, It Wants Him to Keep His Promises*, NPR (Jan. 1, 2017), <https://www.npr.org/2017/01/01/507693919/coal-country-picked-trump-now-they-want-him-to-keep-his-promises>.

⁸⁵ Lisa Hagen, *Trump to Coal Country: Election ‘Is the Last Shot for the Miners,’* THE HILL (Aug. 10, 2016), <https://thehill.com/blogs/ballot-box/presidential-races/291041-trump-to-coal-country-this-election-is-the-last-shot-for>.

⁸⁶ Nathan Rott, *Trump Moves to Let States Regulate Coal Plant Emissions*, NPR (Aug. 21, 2018), <https://www.npr.org/2018/08/21/639396683/trump-moves-to-let-states-regulate-coal-plant-emissions>.

⁸⁷ Scott Finn, *West Virginia Most Pro-Trump State, Election Results Show*, W. VA. PUB. BROAD. (Dec. 5, 2016), <http://www.wvpublic.org/post/west-virginia-most-pro-trump-state-election-results-show#stream/0>.

⁸⁸ Rott, *supra* note 86.

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ David B. McKinley, Opinion, *David McKinley: A Coal Resurgence in Just a Year*, CHARLESTON GAZETTE-MAIL (Jan. 7, 2018), https://www.wvgazette.com/opinion/gazette_opinion/op_ed_commentaries/david-mckinley-a-coal-resurgence-in-just-a-year/article_b9d8ddea-7f1b-59f7-b17c-0c7de487c68c.html.

And in fact, West Virginia has seen a slight resurgence of coal.⁹² In 2017, the Mine Safety and Health Administration found that West Virginia saw an increase of 1,429 coal-related jobs, which is an 11% increase from 2016.⁹³ Over 2019, employment in the Appalachian state grew by 0.9%,⁹⁴ and in 2017, West Virginia had the highest economic growth in the country.⁹⁵ President Trump declared that “we have ended the war on beautiful, clean coal.”⁹⁶ Superficially, it appears as though West Virginia is experiencing an economic comeback. Underneath, though, the economic “comeback” is more complex.

B. *It Is Unsustainable to Rely on the Coal Industry*

The modest recovery in the coal industry was predicted, and it does not have much to do with coal itself.⁹⁷ The Bureau of Business and Economic Research at West Virginia University revealed in a 2017 report that growth in the coal industry was anticipated.⁹⁸ In fact, the report predicts modest increases in coal production until 2022, and then a trend steadily downward.⁹⁹ West Virginia’s trend mimics the ones predicted on a national level.¹⁰⁰

Instead, the trends in coal production and the uptick in West Virginia’s economy have been directly linked to natural gas.¹⁰¹ Although West Virginia’s gross domestic product (“GDP”) has grown relatively quickly over the past two years, it is

⁹² *Id.*

⁹³ Jennifer Ludden, *Coal Jobs Have Gone Up Under Trump, But Not Because of His Policies*, NPR (Feb. 23, 2018), <https://www.npr.org/2018/02/23/586236738/coal-jobs-have-gone-up-under-trump-but-not-because-of-his-policies>.

⁹⁴ Ted Boettner, *Is West Virginia’s Economic ‘Comeback’ Real?*, W. VA. CTR. ON BUDGET & POLICY (Aug. 17, 2018), <https://wvpolicy.org/is-west-virginias-economic-comeback-real/>.

⁹⁵ Nicole Jacobs, *Thanks to Shale, West Virginia Had the Highest Economic Growth in the Country in 2017*, ENERGY IN DEPTH: APPALACHIAN BASIN (Aug. 2, 2018), <https://www.energyindepth.org/thanks-to-shale-west-virginia-had-the-highest-economic-growth-in-the-country-in-2017/>.

⁹⁶ Chris Mooney, *About That War on Beautiful Clean Coal*, WASH. POST (Jan. 30, 2020), <https://www.washingtonpost.com/politics/2018/live-updates/trump-white-house/fact-checking-and-analysis-of-trumps-state-of-the-union-2018-address/about-that-war-on-beautiful-clean-coal/?arc404=true>.

⁹⁷ LEGO & DESKINS, *supra* note 9, at 9–11, 15.

⁹⁸ *Id.* at 15.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ Boettner, *supra* note 94.

almost entirely due to natural gas prices, not coal.¹⁰² As stated previously, natural gas is coal's biggest competitor as it is generally a cheaper energy source.¹⁰³ As the price of natural gas declines, so does the demand for coal.¹⁰⁴ However, in the past two years the price of natural gas has increased, which explains the slight uptick in coal production.¹⁰⁵

For example, in 2016, the price of natural gas exports was \$2.04 per thousand cubic feet.¹⁰⁶ In 2017, natural gas prices rose to \$3.57 per thousand cubic feet.¹⁰⁷ The price of natural gas is rising due to other countries turning from coal to natural gas in order to fuel their own electric grids, causing an increase in export prices.¹⁰⁸ Therefore, higher natural gas prices makes coal appear more competitive in the energy market.¹⁰⁹ Low natural gas prices have seriously weakened the coal industry; now higher prices are inadvertently helping it.

West Virginia's coal-dependent economy is at the mercy of natural gas prices, and this does not bode well for West Virginia's long-term economic plans. Economists have expressed concern that if faced with another commodity slump, West Virginia will fall into a new recession.¹¹⁰ Director of Bureau of Business and Economic Research at West Virginia University, John Deskins, has stated "[n]o matter what happens to coal, West Virginia desperately needs industrial diversification. . . . We desperately need to see greater strength in tourism, or manufacturing, or other sectors."¹¹¹

Furthermore, economists have cautioned the Appalachian state to not rely heavily on data from a limited time frame.¹¹² Economists studying West Virginia's

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ Reid Wilson, *How West Virginia got to 3 percent GDP Growth*, THE HILL (Aug. 4, 2017), <https://thehill.com/homenews/state-watch/345369-how-west-virginia-got-to-3-percent-gdp-growth>.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id.*

economy have stated “[a]ny economic growth is going to be exaggerated” because the state was already at such a low benchmark.¹¹³ Regardless, any economic growth seen is inherently intertwined and heavily concentrated in volatile industries where the work is unstable and diminishing.¹¹⁴

In fact, a five-year study titled “West Virginia Economic Outlook 2019–2023” stated that any growth in the energy sector will be driven by natural gas.¹¹⁵ Further, the report found that even with the slight increase of coal production in the preceding year, few regions within the Appalachian state had seen economic or population growth.¹¹⁶ Instead, most of the state still suffered from a diminishing population and socioeconomic disadvantages.¹¹⁷ Another published report titled “Coal Production in West Virginia: 2018–2040” states that in 2020 coal production will begin a steady decline over the next two decades.¹¹⁸ West Virginia can no longer place its economy in the hands of a volatile industry. The demand for coal is determined by natural gas and because of it, coal is dying. But, that does not mean West Virginia has to go down with it.

III. COMPARING PITTSBURGH’S ECONOMY POST-STEEL WITH DETROIT’S ECONOMIC COLLAPSE POST-AUTO

In a post-coal era, it is essential that West Virginia revitalize its economy. It is to the Appalachian state’s benefit to model its revitalization efforts after Pittsburgh’s diversification success post-steel. Otherwise, West Virginia could be headed toward

¹¹³ *Id.*

¹¹⁴ Ted Boettner & Dean Baker, *Is WV’s Economic ‘Comeback’ Real?*, CHARLESTON GAZETTE-MAIL (Aug. 17, 2018), https://www.wvgazette.com/opinion/gazette_opinion/op_ed_commentaries/ted-boettner-dean-baker-is-wv-s-economic-comeback-real/article_8e25bc5a-b5e5-502c-adaf-f1048f726c77.html.

¹¹⁵ Patrick Gregg, *West Virginia’s Economic Future: State’s ‘Uneven Recovery’ Sees Robust Growth in Some Areas, No Development and Population Losses in Others*, WVU TODAY (Oct. 3, 2018), <https://wvutoday.wvu.edu/stories/2018/10/03/west-virginia-s-economic-future-state-s-uneven-recovery-sees-robust-growth-in-some-areas-no-development-and-population-losses-in-others>.

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.*

an economic collapse similar to that seen in Detroit, a city abandoned by the auto industry.¹¹⁹

A. *The Steel City and its Revitalization*

Pittsburgh, Pennsylvania is still affectionately called “The Steel City” even though it has progressed from its industrial roots.¹²⁰ It is now considered a “tech city,” but in its former years it was home to a robust steel industry.¹²¹ From 1870 to 1910, Pittsburgh experienced the “golden age” of its steel industry.¹²² The city’s population grew to more than 533,000 residents and, at its peak, Pittsburgh produced 60% of the country’s steel.¹²³ Yet, Pittsburgh’s dependence and overspecialization in the steel industry became its downfall. In 1959, an industry-wide steel strike lasted 116 days and highlighted the weaknesses of an economy dependent on a single industry.¹²⁴ The steel industry began to crumble as it competed against cheaper foreign imports.¹²⁵ Twenty-nine steel companies declared bankruptcy over the next forty years and by the 1980s, Pittsburgh’s steel industry had diminished by 75%.¹²⁶ In 1983, Pittsburgh’s economy hit record lows.¹²⁷ Allegheny County, which contains Pittsburgh, had an unemployment rate of 13.9%.¹²⁸ The surrounding metropolitan

¹¹⁹ See Amy Padnani, *Anatomy of Detroit’s Decline*, N.Y. TIMES (Dec. 8, 2013), <https://archive.nytimes.com/www.nytimes.com/interactive/2013/08/17/us/detroit-decline.html>.

¹²⁰ Dan Bobkoff, *From Steel to Tech, Pittsburgh Transforms Itself*, NPR (Dec. 16, 2010), <https://www.npr.org/2010/12/16/131907405/from-steel-to-tech-pittsburgh-transforms-itself>.

¹²¹ *Id.*; Melissa Rayworth, *Pittsburgh Is One of America’s Most “Digitally Inclusive” Tech Cities, Says Brookings Report*, NEXT PITTSBURGH (Nov. 19, 2018), <https://www.nextpittsburgh.com/latest-news/pittsburgh-is-one-of-americas-most-digitally-inclusive-tech-cities-says-brookings-report/>.

¹²² *Beyond Steel: The History of Pittsburgh Business*, POINT PARK UNIV. ONLINE (Oct. 16, 2015), <https://online.pointpark.edu/business/history-of-pittsburgh-business/> [hereinafter *Beyond Steel*].

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ Khalil AlHajal, *Why Didn’t Pittsburgh Go Bankrupt? What the Steel City Did That Detroit Didn’t*, MLIVE (July 22, 2013), https://www.mlive.com/news/detroit/2013/07/why_didnt_pittsburgh_go_bankrupt.html.

¹²⁶ *Beyond Steel*, *supra* note 122.

¹²⁷ Bill Toland, *In Desperate 1983, There Was Nowhere for Pittsburgh’s Economy to Go But Up*, PITTSBURGH POST-GAZETTE (Dec. 23, 2012), <https://www.post-gazette.com/business/businessnews/2012/12/23/In-desperate-1983-there-was-nowhere-for-Pittsburgh-s-economy-to-go-but-up/stories/201212230258>.

¹²⁸ *Id.*

area experienced an unemployment rate of 17.1%.¹²⁹ Between 1970 and 2006, Pittsburgh lost more than 40% of its population.¹³⁰

Yet, Pittsburgh was able to look beyond steel. In the midst of experiencing its economic crisis, The Steel City began its revitalization efforts.¹³¹ Pittsburgh retrained former steelworkers.¹³² The city even launched a controversial initiative to develop over 1,000 acres of industrial decaying land and build homes and commercial buildings.¹³³ It constructed a new, separate identity around the healthcare and technology sectors.¹³⁴

In the 1980s, Pittsburgh began developing a plan to pour state resources into its local universities.¹³⁵ Now, the University of Pittsburgh conducts more than \$650 million in research each year.¹³⁶ In 2016, the University of Pittsburgh came in fifth place nationwide in attracting federal health research funding.¹³⁷ More than \$300 million is spent in sponsored research at Carnegie Mellon University, now considered a global university.¹³⁸ Further, much of Pittsburgh's investment in education has been aimed at funding technology research.¹³⁹ Pittsburgh has emerged as a tech city largely due to its investment in scientific pioneering, including artificial intelligence, at its local universities.¹⁴⁰ Since 2008, over 340 companies have

¹²⁹ *Id.*

¹³⁰ AlHajal, *supra* note 125.

¹³¹ *Beyond Steel*, *supra* note 122.

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ David Streitfeld, *For Pittsburgh, There's Life After Steel*, N.Y. TIMES (Jan. 7, 2009), <https://www.nytimes.com/2009/01/08/business/economy/08collapse.html>.

¹³⁶ Harold D. Miller, *Regional Insights: It's Still Steel City, but Pittsburgh Has Changed*, PITTSBURGH POST-GAZETTE (Sept. 6, 2009), <https://www.post-gazette.com/business/businessnews/2009/09/06/Regional-Insights-It-s-still-Steel-City-but-Pittsburgh-has-changed/stories/200909060227>.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ Heather Somerville, *A Tech Boom in Pittsburgh Brings Hope and Angst*, REUTERS (Oct. 12, 2018), <https://www.reuters.com/article/us-pittsburgh-tech/a-tech-boom-in-pittsburgh-brings-hope-and-angst-idUSKCN1MM13Y>.

emerged out of Carnegie Mellon University.¹⁴¹ In the last fiscal year, twenty-three start-ups emerged out of the University of Pittsburgh for the third year in a row.¹⁴² Pittsburgh's investment in its education has allowed it to become a "hotbed for technology growth."¹⁴³ Uber, Google, Facebook, and Ford have come to Pittsburgh and have incentivized tech talent from across the country to come with them.¹⁴⁴ Pittsburgh has been likened to a small "Silicon Valley."¹⁴⁵

In addition to the tech industry, Pittsburgh has made its mark by investing in healthcare. University of Pittsburgh Medical Center ("UPMC") did not exist in 1980.¹⁴⁶ Now, it is a \$7 billion corporation and one of the largest academic medical centers in the world.¹⁴⁷ Pittsburgh is also home to Allegheny Health Network, whose parent corporation is Highmark Health.¹⁴⁸ Highmark plans to create new hospital buildings around Pittsburgh which is estimated to create 800 health care jobs.¹⁴⁹

Pittsburgh is now thought to be the most livable city in the continental United States due to its focus on its infrastructure, healthcare, and education.¹⁵⁰ As of May 2018, Pittsburgh had a 3.8% unemployment rate, which was lower than the national

¹⁴¹ *Company Creation*, CTR. FOR TECH. TRANSFER & ENTER. CREATION, <https://www.cmu.edu/cttec/startups/index.html#:~:text=Company%20Creation&text=Since%202008%2C%20341%20companies%20were,advanced%20materials%20to%20medical%20devices> (last visited Nov. 22, 2020).

¹⁴² Somerville, *supra* note 140.

¹⁴³ Miller, *supra* note 136.

¹⁴⁴ Jill Krasny, *Why Google, Uber, and Facebook Are Flocking to This Quiet Rust Belt City*, INC. (May 25, 2018), <https://www.inc.com/magazine/201805/jill-krasny/destination-pittsburgh-pennsylvania.html>.

¹⁴⁵ Somerville, *supra* note 140.

¹⁴⁶ Miller, *supra* note 136.

¹⁴⁷ *Id.*

¹⁴⁸ Kris B. Mamula, *Pittsburgh's Economic Ties to Health Care Grow with Latest Surge of Investments by UPMC, Highmark*, PITTSBURGH POST-GAZETTE (Nov. 6, 2017), <https://www.post-gazette.com/business/healthcare-business/2017/11/05/upmc-highmark-allegheny-health-network-new-hospitals-economy-impact-jobs-3-billion/stories/201711050136>.

¹⁴⁹ *Id.*

¹⁵⁰ *Pittsburgh Named Most Livable City in Continental United States*, VISIT PITTSBURGH (last visited Aug. 14, 2020), <https://www.visitpittsburgh.com/media/news-releases/pittsburgh-named-most-livable-city-in-continental-united-states/>; Luke Torrance, *Report: Pittsburgh Named One of the Most Livable Cities in the U.S.*, PITTSBURGH BUS. TIMES (Sept. 5, 2019), <https://www.bizjournals.com/pittsburgh/news/2019/09/05/reportpittsburgh-named-one-of-most-livable-cities.html>.

average.¹⁵¹ In 2018, *U.S. News & World Health Report* wrote, “[t]ransplants are surprised to find a hub of technology and education in the area. . . . Its old blue collar reputation is being replaced and the quality of life continues to improve with new industries that make Pittsburgh home.”¹⁵²

However, Pittsburgh’s revitalization did not happen overnight, and the transition from a manufacturing economy to a mixed education/technology economy was not without growing pains.¹⁵³ Even with the possibility of retraining, steelworkers could not easily, and in some instances, ever, transition to being tech workers.¹⁵⁴ Pittsburgh still has severe “pockets of poverty” and an aging population.¹⁵⁵ Christopher Briem, a regional economist at the University of Pittsburgh, has said “[t]hese issues of how to deal with or manage this type of growth are new here in Pittsburgh” as previously the city had seen “70 years of decline.”¹⁵⁶ Yet, even with its difficulties, Pittsburgh has unquestionably transformed and diversified its economy. The “Steel City” is no longer dependent on steel.

B. “Motor City” is Abandoned by the Auto Industry

Detroit, Michigan earned its nickname, “Motor City,” due to its once robust automobile industry.¹⁵⁷ Detroit was the birthplace of the auto industry and was once one of the wealthiest cities in America.¹⁵⁸ Between 1910 and 1950, Detroit experienced a period of rapid growth in its economy due to the auto industry.¹⁵⁹ By

¹⁵¹ *Local Area Unemployment Statistics*, U.S. BUREAU OF LABOR STATISTICS, https://data.bls.gov/timeseries/LAUMT423830000000003?amp%253bdata_tool=XGtable&output_view=data&include_graphs=true (last visited Nov. 27, 2020).

¹⁵² Eric Heyl, *Best Places to Live in 2018: Pittsburgh Makes U.S. News Rankings*, PATCH (Apr. 10, 2018), <https://patch.com/pennsylvania/pittsburgh/best-places-live-2018-pittsburgh-makes-u-s-news-rankings>.

¹⁵³ AlHajjal, *supra* note 125.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ Somerville, *supra* note 140.

¹⁵⁷ *America’s Motor City*, DETROIT HISTORICAL SOC’Y, <https://detroithistorical.org/detroit-historical-museum/exhibitions/signature-exhibitions/america%E2%80%99s-motor-city> (last visited Apr. 8, 2020).

¹⁵⁸ Paul Harris, *How Detroit, the Motor City, Turned Into a Ghost Town*, THE GUARDIAN (Oct. 31, 2009), <https://www.theguardian.com/world/2009/nov/01/detroit-michigan-economy-recession-unemployment>.

¹⁵⁹ *Id.*

1950, the city's population hit a peak of nearly two million¹⁶⁰ and had the highest median income of any major city.¹⁶¹ Detroit experienced an upswing in population as people moved to find jobs working for the “Big Three” auto companies: Ford, General Motors, and Chrysler.¹⁶²

Yet, the golden years of Detroit's auto industry were short-lived.¹⁶³ By the 1940s, manufacturing jobs spread outward from its heavy concentration in Detroit due to strikes that halted manufacturing progress.¹⁶⁴ Factories began to move away from one another, so that the strikes at one plant would not affect work at another.¹⁶⁵ Then, the auto industry introduced automated machines, which resulted in job losses in the tens of thousands.¹⁶⁶ Competition from cheaper foreign markets caused the industry to diminish further.¹⁶⁷ Between 1950 and 1980, the city saw a “catastrophic population loss” of over 600,000 residents.¹⁶⁸ Coupled with the energy crisis in the 1970s and the economic recession in the 1980s, the auto industry was fleeing Detroit, and its population was going with it.¹⁶⁹

In 2009, Detroit saw a record-high unemployment rate—28%.¹⁷⁰ By 2011, only 714,000 residents remained.¹⁷¹ Detroit, unable to pay \$18 billion in liabilities,

¹⁶⁰ Thomas J. Sugrue, *From Motor City to Motor Metropolis: How the Automobile Industry Reshaped Urban America*, AUTO. IN AM. LIFE & SOC'Y, http://www.autolife.umd.umich.edu/Race/R_Overview/R_Overview2.htm (last visited July 5, 2020).

¹⁶¹ Harris, *supra* note 158.

¹⁶² Padnani, *supra* note 119.

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ Scott Beyer, *Why Has Detroit Continued To Decline?*, FORBES (July 31, 2018), <https://www.forbes.com/sites/scottbeyer/2018/07/31/why-has-detroit-continued-to-decline/#48c13b283fbc>.

¹⁶⁹ *Id.*

¹⁷⁰ Lester Graham, *Detroit's True Unemployment Rate*, MICH. RADIO (Feb. 16, 2018), <https://www.michiganradio.org/post/detroits-true-unemployment-rate>.

¹⁷¹ Katherine Q. Seelye, *Detroit Census Confirms a Desertion Like No Other*, N.Y. TIMES (Mar. 23, 2011), <https://www.nytimes.com/2011/03/23/us/23detroit.html>.

declared bankruptcy in 2013.¹⁷² In 2017, about 34.5% of residents lived below the poverty level.¹⁷³ At the end of 2018, Detroit had an unemployment rate of 8.7%, higher than the national average.¹⁷⁴ Detroit, abandoned by the auto industry, was left with crumbling infrastructure, a declining economy, a fleeing population, and an increase in crime.¹⁷⁵

A Detroit historian, Kevin Boyle, attributes the city's economic downfall to its dependence on a single industry, saying "Detroit suffered more because it didn't diversify."¹⁷⁶ Since the collapse of the auto industry, the Motor City has taken minimal steps to grow and diversify its economy.¹⁷⁷ Unlike Pittsburgh, Detroit does not have a university infrastructure in place that it can invest in.¹⁷⁸ Further, Detroit is plagued by "sprawling decaying housing" which does not entice investors or companies.¹⁷⁹ Instead of using its industrial expertise to re-invent itself, Detroit continues to reel from its past financial defeats.¹⁸⁰ It is evident that although the auto industry has abandoned Detroit, the city has yet to move on.

IV. PROPOSED LEGISLATIVE SOLUTIONS

The Appalachian State can learn from both Pittsburgh's Renaissance and Detroit's economic collapse in order to stabilize and strengthen its economy.

A. *Moving Beyond Coal*

First, West Virginians must urge elected officials to stop pursuing economic policies that attempt to breathe life into a dying industry. Elected officials do West

¹⁷² David Francis, *Why Detroit Won't Have a Pittsburgh Renaissance*, FISCAL TIMES (July 24, 2013), <http://www.thefiscaltimes.com/Articles/2013/07/24/Why-Detroit-Wont-Have-a-Pittsburgh-Renaissance>.

¹⁷³ *Poverty Level in Detroit Drops for Third Straight Year; 45,000 Detroiters Move Out of Poverty Since 2015*, CITY OF DETROIT, <https://detroitmi.gov/news/poverty-level-detroit-drops-third-straight-year-45000-detroiters-move-out-poverty-2015> (last visited Apr. 23, 2020).

¹⁷⁴ Graham, *supra* note 170.

¹⁷⁵ Padnani, *supra* note 119.

¹⁷⁶ *Id.*

¹⁷⁷ Francis, *supra* note 172.

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ Bill Saporito, *Pittsburgh's Lessons for Detroit*, TIME (July 19, 2013), <http://nation.time.com/2013/07/19/pittsburghs-lessons-for-detroit/>.

Virginia a serious disservice when they misdiagnose its relationship with coal. Many representatives¹⁸¹ continue to work alongside President Trump on deregulation policies in a futile attempt to “bring back coal” in an effort to appease their constituents.¹⁸²

For instance, in 2019, Governor Jim Justice signed three bills into law that were intended to benefit the coal industry.¹⁸³ State House Bill 3142 decreased the state’s severance tax on thermal and steam coal from five to three percent over three years.¹⁸⁴ House Bill 3144 created a tax rebate for mining investments.¹⁸⁵ Senate Bill 635 managed safety regulations and dealt with abandoned mines.¹⁸⁶ When signing the bills, Governor Jim Justice stated, “[i]n my life, from a business standpoint, a financial standpoint and everything I know about principles of life and everything, I owe it all to coal. Every bit of it.”¹⁸⁷

But, deregulation will not bring back coal. Loyalty to the industry will not bring back coal. The demand for coal is at the mercy of natural gas prices, and this is not something West Virginia can control. West Virginians must urge their elected officials to consider other futures and alternatives for the state. It is misleading for officials to suggest that they can replicate the golden age of coal. It is crucial that West Virginia mimics Pittsburgh’s successes and begins to look beyond its dependence on a single industry. Constituents must hold their elected officials responsible in order to ensure West Virginia’s future. By continuing to elect officials who remain loyal to the coal industry, West Virginia is ensuring that it stays trapped in its detrimental relationship with the volatile and unstable energy sector. Difficult as it may be to move onward from an industry that has shaped the state financially

¹⁸¹ See generally Jess Mancini, *Capito, McKinley Tout Trump Plan to Roll Back Coal Regulations*, PARKERSBURG NEWS & SENTINEL (Aug. 22, 2018), <https://www.newsandsentinel.com/news/local-news/2018/08/capito-mckinley-tout-trump-plan-to-roll-back-coal-regulations/>.

¹⁸² Frank Convery, *Why Coal Is Not Coming Back*, ENVTL. DEF. FUND (Apr. 14, 2017), <https://www.edf.org/wilson/why-coal-not-coming-back>.

¹⁸³ John Mark Shaver, *Gov. Jim Justice Signs Coal Bills*, W. VA. NEWS (Mar. 27, 2019), https://www.wvnews.com/news/wvnews/gov-jim-justice-signs-coal-bills/article_e49a024b-4be2-579a-ab03-d2854f442d2b.html.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

and culturally, West Virginians must urge their officials to stop attempts to resurrect the past, and instead move beyond it.

B. Education

West Virginia can move beyond coal by diversifying and revitalizing its economy through investing in its crumbling and neglected education system. Similar to post-steel Pittsburgh, West Virginia's economy would benefit if the state invested in its education sector. It has yet to do so.

In 2018, West Virginia made national headlines due to a twelve-day state-wide education strike.¹⁸⁸ Educators across the state went on strike after West Virginia Governor Jim Justice approved legislation that would only grant teachers, school service personnel, and police officers a mere 2% pay increase and failed to provide health insurance funding.¹⁸⁹ The reality of West Virginia schoolteachers is that they make the 47th lowest salary in the country.¹⁹⁰ In 2018, West Virginia had approximately 725 teacher vacancies that remained unfilled.¹⁹¹ Educators are leaving West Virginia for better paying work; every surrounding state provides a higher salary.¹⁹²

In order to end the 2018 statewide strike, the legislature approved a 5% pay raise for all state employees in the 2020–2021 fiscal budget.¹⁹³ However, increasing educators' salaries requires approval of separate legislation from the budget bill.¹⁹⁴ No separate legislation was approved.¹⁹⁵ Thus, while the money is allocated for an educator pay raise, the raise will not go into effect unless the legislature proposes

¹⁸⁸ Ellie Anzilotti, *West Virginia's Striking Teachers Are The Key to Building A Post-Coal Economy*, FAST CO. (Mar. 5, 2018), <https://www.fastcompany.com/40539573/west-virginias-striking-teachers-are-the-key-to-building-a-post-coal-economy>.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ *Id.*

¹⁹⁴ Steven Allen Adams, *West Virginia Senate Passes Budget Without Teacher Raises; Governor Justice to Call for Special Session*, THE INTELLIGENCER (Mar. 7, 2019), <https://www.theintelligencer.net/news/top-headlines/2019/03/west-virginia-senate-passes-budget-without-teacher-raises-governor-justice-to-call-for-special-session/>.

¹⁹⁵ *Id.*

separate legislation.¹⁹⁶ Yet, even if the hypothetical raise passed, West Virginia still falls far behind the national average for educator salaries.¹⁹⁷

When looking to the future, Governor Jim Justice has stated it is unlikely the next fiscal budget will propose another pay increase for state employees.¹⁹⁸ At the end of 2019, West Virginia was \$33 million below estimates for general revenue collections due to “a significant slump in energy prices . . . [and] coal sales [that] have also recently slowed.”¹⁹⁹ The Governor has indicated it is doubtful educators will see a pay raise in 2020–2021 due to the already tight fiscal budget.²⁰⁰ Randi Weingarten, national president of the American Federation of Teachers, said “[t]he only time there was a real focus on public education . . . in this state was when there was a walkout last year.”²⁰¹

West Virginia needs to begin by passing legislation that incentivizes educators to stay working within the Appalachian state. This can be done through pay raises for educators and related personnel, in addition to securing funding for educators’ healthcare. It is vital that the legislature commit to passing legislation in order to give state personnel a pay raise to allow West Virginia’s educators’ salaries to compete with surrounding states. In order to increase the allocation of funding for educators, legislatures could “rais[e] taxes on coal . . . which politicians have been reluctant to do.”²⁰²

Furthermore, West Virginia must increase its funding to its higher education sector. Post-steel Pittsburgh invested in its higher education and universities in order to build itself a new economic sector—tech. Meanwhile, although West Virginia does not have the same educational set-up, the state has been continuously disinvesting in its two major universities: West Virginia University in Morgantown

¹⁹⁶ *Id.*

¹⁹⁷ Hoppy Kercheval, *WV Teacher Pay Is Higher, But Still Struggling to Keep Up*, METRO NEWS (Jan. 23, 2020), <http://wvmetronews.com/2020/01/23/wv-teacher-pay-is-higher-but-still-struggling-to-keep-up/>.

¹⁹⁸ Hoppy Kercheval, *Justice Unlikely to Propose Third Year of Pay Raises*, METRO NEWS (Jan. 3, 2020), <http://wvmetronews.com/2020/01/03/the-niceness-challenge>.

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ Doug Stanglin, *West Virginia Teachers’ Strike Ends: Teachers to Return to Class Thursday, Unions Say*, USA TODAY (Feb. 20, 2019), <https://www.usatoday.com/story/news/nation/2019/02/20/west-virginia-teachers-strike-day-2-schools-most-counties-closed/2925738002/>.

²⁰² Anzilotti, *supra* note 188.

and Marshall University in Huntington. West Virginia's budget forecast shows no increase to higher education in the coming years even though it has consistently cut funding to higher education in the past in order to bridge gaps in the budget.²⁰³ Disinvesting in higher education has resulted in tuition increases for both four-year and two-year universities and colleges.²⁰⁴ Enrollment in public colleges and universities in West Virginia has declined by 6.1% since 2010.²⁰⁵ In 2010, 58.5% of the state's high school graduates attended college as opposed to 45.2% in 2018.²⁰⁶ Furthermore, now 65% of West Virginia students graduate with student loan debt, which is the fifth highest rate in the country.²⁰⁷

Instead of continuing to invest in a dying energy industry, West Virginia needs to focus its fiscal budget on higher education. By restoring affordable education funding, West Virginia will increase the skills and diversity of its graduating and newly employable workforce and help ensure graduates stay in West Virginia. Dr. Paul Hill, Chancellor of the West Virginia Higher Education Policy Commission, has stated “[i]nvestments in higher education yield multi-faceted returns, from attracting new employers to driving the research and innovation needed to create a robust private-sector economy.”²⁰⁸ If West Virginia does not begin to diversify its economy, it will go the way of post-auto Detroit—clinging to a once robust economy that has left it.

C. *Tourism*

Another way West Virginia can move beyond coal is by diversifying and revitalizing its economy through investment in its tourism sector, one of its fastest growing sectors.²⁰⁹ The legislature recently passed the Tourism Act which has begun

²⁰³ Sean O’Leary, *Disinvestment in Higher Education Continues to Hurt West Virginia’s Future*, W. VA. CTR. ON BUDGET & POL’Y: BLOG (Mar. 2, 2020), <https://wvpolicy.org/disinvestment-in-higher-education-continues-to-hurt-west-virginias-future/>.

²⁰⁴ *Id.*

²⁰⁵ *Id.*

²⁰⁶ *Id.*

²⁰⁷ *Id.*

²⁰⁸ Jessica Kennedy, *West Virginia’s Public Higher Education Institutions Have \$2.7 Billion Impact on State*, W. VA. HIGHER EDUC. POL’Y COMM’N (Aug. 4, 2016), <http://www.wvhepc.edu/west-virginias-public-higher-education-institutions-have-2-7-billion-impact-on-state/>.

²⁰⁹ Jim Workman, *Report: WV Tourism Showing Vast Improvement for State’s Image*, STATE J. (Dec. 19, 2016), https://www.wvnews.com/statejournal/report-wv-tourism-showing-vast-improvement-for-state-s-image/article_748dba75-8b61-56e3-952e-fae79337cfe7.html.

to transform the way the state views its tourism industry.²¹⁰ Tourism Commissioner, Chelsea Ruby, stated “[p]rior to that (bill), tourism was primarily responsible for marketing and advertising . . . that bill gave us the added responsibility of looking at industry development—figuring out how to make the tourism industry grow and expand.”²¹¹ In 2017, the Tourism Office launched the “Wild, Wonderful, West Virginia” campaign, which generated approximately \$12 million in state and local taxes.²¹² In 2018, West Virginia’s tourism industry grew for the second year in a row, surpassing the national growth by 58%.²¹³ This two-year growth reversed a steady period of decline in the tourism industry.²¹⁴

While West Virginia’s tourism industry has reported positive results, there is still vast room for improvement.²¹⁵ West Virginia needs to expand upon the Tourism Act and increase its funding in order to allow the tourism industry to continue to grow. The Tourism Office is currently given a budget of \$7 million.²¹⁶ While there was a proposal to double the tourism budget to \$14 million for the 2020–2021 fiscal year, the legislature cut this proposal down to \$7 million.²¹⁷ The West Virginia legislature must increase the funding for the tourism industry when determining the budget for the 2021–2022 fiscal year, and in fact should adopt the 2020–2021 initial proposal of \$14 million.

²¹⁰ Jim Workman, *Tourism Numbers Improving for West Virginia*, REG.-HERALD (July 1, 2018), https://www.register-herald.com/news/money/tourism-numbers-improving-for-west-virginia/article_1ebblbac-83ea-5291-a673-85196e5c5fa0.html.

²¹¹ *Id.*

²¹² Workman, *supra* note 209.

²¹³ *West Virginia Tourism Industry Outpaces National Growth By 58 Percent*, OFFICE OF THE GOVERNOR (Oct. 16, 2019), <https://governor.wv.gov/News/press-releases/2019/Pages/West-Virginia-tourism-industry-outpaces-national-growth-by-58-percent.aspx>.

²¹⁴ *Id.*

²¹⁵ Jim Workman, *Tourism Numbers Improving for West Virginia*, REG.-HERALD (July 1, 2018), https://www.register-herald.com/news/money/tourism-numbers-improving-for-west-virginia/article_1ebblbac-83ea-5291-a673-85196e5c5fa0.html.

²¹⁶ *Can Tourism Help Revive West Virginia’s Coal-Based Economy*, LONGWOODS INT’L, <https://longwoods-intl.com/can-tourism-help-revive-west-virginias-coal-based-economy> (last visited Jan. 1, 2020).

²¹⁷ Sean O’Leary, *FY 2020 Budget Recap*, W. VA. CTR. ON BUDGET & POLICY, <https://wvpolicy.org/fy-2020-budget-recap/> (last visited Mar. 2, 2020).

With more funding, the Tourism Office can begin implementation of its long-term goals, which include re-branding to counteract negative perceptions.²¹⁸ Long-term strategies also include developing additional amenities to draw new visitors to existing state parks, linking West Virginia trails with other regional trails and bikeways, improving regional and local access to ski areas, and eliminating the second home tax disadvantage.²¹⁹

Further, with more funding, the Tourism Office can begin education on the tourism destinations that the state provides.²²⁰ The Tourism Office has stated quite frankly “West Virginia has an image problem . . . much of the world is blinded by ugly stereotypes by folks who’ve never set foot within our borders.”²²¹ Many prospective visitors are unaware of the diverse mountainous landscape and uncongested lifestyle, which can attract tourists.²²² West Virginia has thirty-seven state parks and eight state forests within its borders, and its landscape allows visitors to hike, bike, fish, boat, snowboard, and swim.²²³ The Tourism Office boasts the state has “abundant good nature” and a “storied past.”²²⁴ As one of West Virginia’s fastest growing industries, it can only continue to expand if West Virginia invests in it. If West Virginia takes its time to invest in its tourism marketing, the state will not only diversify its economy, but also create a new identity. An identity that is separate from coal, but one that is still uniquely West Virginia.

CONCLUSION

West Virginia may be deeply intertwined with a dying industry, but that does not mean it has to go down with it. Elected officials cannot “bring back coal” because the Appalachian state cannot sustain a volatile and unstable energy source long-term. If West Virginia fails to move onward from coal and diversify its economy, it may meet a fate similar to post-auto Detroit. Instead, West Virginians need to elect officials who recognize coal cannot be dragged from the state’s past into its future.

²¹⁸ AECOM & MARY MEANS + ASSOCS., WEST VIRGINIA TEN YEAR TOURISM PLAN 5–7 (Sept. 2012), <https://wvtourism.com/wp-content/uploads/2015/09/AECOM-West-Virginia-Final-Report.pdf>.

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ Chelsea Ruby, *What Makes West Virginia #AlmostHeaven To Me*, *WV Tourism*, W. VA. TOURISM OFFICE, <https://wvtourism.com/AlmostHeaven/> (last visited Mar. 1, 2020).

²²² *Id.*

²²³ *State Parks and Forests*, W. VA. TOURISM OFF., <https://wvtourism.com/adventure-play/state-national-parks/> (last visited Mar. 1, 2020).

²²⁴ *Id.*

Consequently, elected officials should model revitalization efforts after Pittsburgh's renaissance by investing in its education and tourism sectors in order to diversify its economy. Coal may be West Virginia's past, but it should not be its future.

