

Diversifying Appalachian coal-dependent economies: A case study using participatory action
research for community engagement

by

Amy Kelly

B.A., Maryville College, 2005

A THESIS

submitted in partial fulfillment of the requirements for the degree

MASTER OF SCIENCE

Department of Landscape Architecture and Regional & Community Planning
Community Development Program

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2017

Approved by:

Major Professor
Cornelia Flora

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Abstract

Economic development in Appalachia has failed to achieve socioeconomic parity with the rest of the nation, especially in coal-dependent communities. This thesis examines the history of development in the region including a case study of unincorporated former coal camps in Clearfork Valley to understand how Community Capitals Framework and Appreciative Inquiry may contribute to equitable and inclusive community development. While community capital asset investment was key to achieving results and creating additional assets in the focus community, the community often had limited access to natural, financial, built and financial capitals. Social capital was the sustaining and catalyzing asset. Community developers can play a key role in Appalachia by providing capacity, outreach, and helping communities identify and invest in their accessible capitals.

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Acknowledgements

I would first like to thank my thesis advisor Dr. Cornelia Flora for the profound support, positive outlook, and constantly reading between the lines and tapping into the heart of the community work.

I would also like to extend gratitude to the other members of my committee Dr. Huston Gibson of Kansas State University and Dr. Mary Emery of South Dakota State University for their valuable input and patience.

I could not have completed this research or shared valuable insights of community members who welcomed me with open arms. Thank you to Tonia Brookman, April Jarocki, Vickie Terry, Carol Judy, DJ Coker, Sam Marlow, Gary Johnson, Marie Webster, Candace Horn, Marie Cirillo, and many others living in Clearfork Valley.

Finally, I must express my very profound gratitude to my husband Lyle Kelly and my daughter Aidia Kelly for providing me with unfailing support and continuous encouragement throughout my years of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without their willingness to provide me the space and time to explore my passion of community development in Appalachia. Thank you.

Author

Amy Kelly

Dedication

I dedicate this work to the late Carol Judy, our forest granny who taught us all so much about living beyond the confines of the way things are and to continuously reach for the way things ought to be.

Preface

My familiarity with the forest floor is that it's a skin layer on the body of the mountain and the bones are the rocks and stuff, and the flesh, just like all the dirt, and the things of that nature. I don't really have good words for it, but it cohabits with itself. The seasons and the cycles are part of it, so the timeline, timespan, and attention of a mountain is different than a human being's.

That's why the forests could send people forth, and have a little patience. A hundred years ain't much to 'em, but it's a lot to us. If the earth has got enough sense to send people forth to come back with multi kinds of knowledge to be part of the solution of beginning the regenerative healing that's needed, then who am I to question that?

The role I play is finding folks who seem to have an interest or knowledge [and] are willing to do something. Sometimes they succeed, and sometimes they don't, but people don't seem to give up too much. We're part of them [the mountains] and they like us. Whatever creation stories you believe in, people have always been part of the story, but not all of the story.

~Carol Judy, Clearfork Valley

Chapter 1 - Introduction

What does it mean to live in a resource-dependent region or town especially when that resource is being depleted? Is it possible to invest in various other assets to contribute to a more diversified and successful economy? What is a successful economy for those that currently call Appalachia home? What is the community developer's role in resource dependent communities, and what tools are most helpful? These are the questions Appalachia has faced for decades but there are several culminating factors that make it ever more essential for community developers in the region to work with Appalachian communities to find the answers to these questions.

Appalachia is currently gaining national attention because the country is facing a transition period in energy production and policy. The Appalachian region is also gaining national attention as opioid addiction has passed epidemic levels. Appalachia was in the national spotlight during the last presidential election and served as a regional example for these respective policy effects.

The current bust which lies on the very long downward trend of coal-mining employment in Appalachia, is different than traditional boom and bust cycles in Appalachia. There are fewer people in these rural areas and less room for failure if the communities continue to exist. Many communities in Appalachia have already seen out-migration as coal camps housing pools of labor to power America have already dwindled. While for some towns, the mining industry still provides good paying employment, circumstances have now aligned so that those jobs are scarcer, the jobs less secure and the wages lower. Structural changes in the coal industry saw the increased transition from underground mining techniques which required heavy labor to surface and mountaintop removal mining which rely on heavy machines and explosives.

In 2015, central Appalachia had the largest decline in coal production of any other region in the nation--40 percent below the annual Appalachian average in the four previous years (U.S. Energy Information Administration, January 8, 2016). The U.S. Energy Information Administration (January 8, 2016) states this decline is, "...largely because of its difficult mining geology and high operating costs" (para 2).

An extensive body of research reveals Appalachia's historic dependence on coal mining as an economic base (Coleman, 2001; Salstrom, 1994; Dunaway, 1996; Eller, 1982; Drake, 2003). Several studies have linked this dependence on coal mining with persistent

socioeconomic distress (Wood & Bischak, 2000; Hendryx & Ahern, 2009). Stedman, Parkins, & Beckley (2004) found while mining is associated with higher median household income when compared to non-resource based counties, higher poverty rates also exist in mining areas. Many researchers have examined more deeply the historical causes of this dependence and the systemic actors and actions that supported it (Lewis, Johnson, & Askins, 1978; Gaventa, 1980; House & Howard, 2011). A large portion of this literature points to absentee and concentrated landownership which significantly affects or predicts economic development trends and compromises decisions that would otherwise be based on the well-being of local community residents (Gaventa, 1980; Goodstein, 1989; Austin & Clark, 2011).

By deepening our understanding through a case study of the string of unincorporated past coal camps in the Clearfork Valley which stretches across Tennessee and Kentucky, we can understand how the economic landscape has already changed in Appalachia and what may be in store for other towns that have maintained their economic dependence on coal. Looking closer one can see that the rugged independence of the early settlers in Appalachia was often compromised by extractive industries. Once coal moves out, is a different industry substituted for an extractive industry that will produce the same poor socioeconomic results? Using the colonial approach that early Appalachian scholars identified, the coal industry had such power and influence that political representatives for the area were merely placed in positions to serve the industry's needs.

This can be assessed by examining the investments in assets and the entities these investments benefited. There was built capital as roads were constructed to serve the coal and logging industry's transportation needs for exporting natural capital. The coal industry has had significant impacts in political capital and local governance as well as social and cultural capital, as whole towns were created to provide a labor supply for mining. The natural capital was turned into financial capital that was not invested in the community but was exported to financial centers outside of the community (Gaventa, 1980). Land was held by absentee owners and management companies seeking only to lease minerals for extraction –not as a community development asset (Gaventa, 1980). Education was undervalued and underinvested in, as the mines did not need an educated labor force, which benefited those in power. The education offered were vocational skills tailored to industry demands resulted in compromised and industry-dependent human capital.

Previous efforts of economic development are not working to fundamentally change quality of life indicators in Appalachia, perhaps because those efforts continue to rely on coal-mining and manufacturing recruitment. Regional environmental advocacy, private foundations and other non-profit organizations are engaging in economic diversification and community development strategies in a concerted way for the first time. For many organizations that traditionally wrestled with environmental issues related to coal mining and water quality, the continued rhetoric of “War on Coal” in response to requested regulations was forcing the question, if not coal, then what will provide good paying jobs in these rural mountainous towns? Environmental organizations had started exploring the development of other energy production such as solar and wind (Collins, Hansen, & Hendryx, 2012). The shift in cultural capital in terms of what makes a “real” job requires that all residents are able to participate in community development and economic diversification vision and goals.

Research, programs and models are needed that incorporate an understanding of the historical dependence on coal mining and lead to resident-empowered economic diversification that invests in existing assets to achieve whole community well-being. Using Community Capitals Framework, community developers have been able to evaluate successful investment of existing community assets. Community Capitals Framework has also been paired with Appreciative Inquiry as a process for asset mapping. Would this process work in a resource dependent community and specifically in Appalachia as economic developers and communities oscillate between the coal mining legacy and the unclear future?

I set out to examine the operations of one community or defined area within a historically resource dependent coal-mining region. I had hoped to bring the practice of asset mapping here as a participatory action research endeavor. What the research became was more an examination of things as they are, a visionary group’s functioning within a resource-dependent community and how a community developer might interact with the group. This work is grounded theory examining the history and present of an area in Southern Appalachia.

I found that the community leaders who had been active in community development had themselves formed a community identity separate from many of the locals. That identity was given to them by outside community development professionals. This separation and alternative identity brought strengths and weaknesses to their approaches. During the time I spent in the community, I learned how the world market affects national, state, and local operations, and how

people see their assets. World Systems Theory provides the theoretical basis to understand how coal, as it lost market share in the world, affected how the nation-state of the USA, and how quasi-federal entities located in the region such as the ARC and TVA changed to accommodate transitions in energy products and federal policies. These quasi-governmental organizations embarked on a plan to maintain coal production in an area that had already responded to market shifts based on natural gas prices and environmental regulations. As a region such as Appalachia has a long history of dependency as a peripheral zone which contributes to the lack of infrastructure (Salstrom, 1994).

I found that the most difficult thing in this resource dependent community was to imagine they could be successful at anything other than their past accomplishments. As the south might be isolated from the power of the north and Appalachia might be isolated from the south, this community was ostracized too as part of the county—often overlooked or singled out for their legacy as a mining area. The leaders and visionaries in the communities often operated in their own isolated group because of the long history of discounting or ridicule for new ideas and even violence. Sexism and racism continue to play a role in collective empowerment and the limited financial and built resources are perceived barriers that often prevent the examination of possibility. The visionaries had many ideas. It was difficult for them to focus on one or two with constant crises at hand given that they are currently the de facto service providers for the area. The community was most successful when investing in social and cultural capital which created the conditions to attract and re-invest in financial, built, human, natural and political capital. Investing in these capitals were able to enhance social and cultural capital in a cycle. Community developers can assist communities with capacity, outreach, and identifying and investing in existing accessible capitals.

Chapter 2 - Background

Diversification vs. Coal

The Appalachian region and its national position as the working-class area dependent on coal for its economy is important to explore as it foreshadows the current opportunities and challenges of community economic development in the region. In the last couple years, national attention has turned to Appalachia as the country faces a choice on energy production in the future. There is considerable focus on the coal industry and concern for the jobs that will be lost in that sector due to environmental regulations or market competition from natural gas and renewable energy. As the conversation about coal mining and jobs rose very prominently, each of the main political parties seized on this argument of coal as savior versus diversification.

The Obama administration was accused of a “War on Coal” for the Clean Power Plan, the first proposed regulation of carbon emissions from power plants burning coal (Cox, 2014). The administration, in turn, proposed the Power+ (Power Plus) Plan which would allocate \$9 billion dollars through various government agencies to restore solvency of pensions for miners, workforce retraining, tax credits for carbon capture and sequestration and economic development of abandoned mine lands in the Appalachian coalfields (The White House Obama Administration, 2016).

At an annual Good Jobs Green Jobs Conference which unites labor unions and environmental organizations, Vice President Joe Biden (2015) gave a speech which explored the positioning of Appalachia in a capitalist world system and the social contract between the State and communities:

...The administration has what we call the Power Plus plan which would take such actions as restoring the solvency of pensions for miners who worked hard all their lives and they deserve what they earn. We've done it before in the railroad industry. It's time to make sure we do it for coal miners. We also think we should invest tens of millions of dollars to diversify coal economies and provide new job training and opportunities for dislocated workers. We call for investing a billion dollars over the next five years to redevelop unreclaimed mines which are absolutely sucking the soul out of communities but have the potential to revitalize these same communities. All of this matters because the market is proving a simple fact. Companies are pricing the carbon of coal as a cost of doing business across the board. If we didn't have a single regulation the days of coal are fundamentally changing because it's no longer cost effective. It's a simple fact that reality has a way of intruding and the reality of the day is market forces in addition to all of us are intruding on the way we generate electricity and energy in this country, but yet

too many politicians and special interests set up a false choice. Either you see coal as the key energy choice of the future or you don't and therefore you're declared as fighting a war on coal and against the people in coal communities. The real choice is accepting the reality of a consequential energy transformation or denying it to the peril of those communities which are already over the last decade and a half seeing significant negative transformation. The real choice is stepping up and doing everything we can to help those communities through this inevitable transition or doing everything you can to undermine that to help purely for political and corporate interest in coal regions... When you hear officials chant War on Coal ask them what they're doing to help these communities face the realities of a changing economy. If they really care about these communities ask those members in Congress to fund the Power Plus Plan to secure pensions for mine workers and help train them for new and good paying jobs to revitalize the very mines that corporations stripped and left bare. Ask them what their plan is aside from playing politics with people's livelihoods..."

Non-profit organizations and community leaders in Appalachia worked to provide grassroots support and lobbying for the Power Plus plan as they saw the influx of financial capital as a boost to economic diversification in Appalachia. They garnered 28 local government resolutions in favor of the plan-- many of them coal-dependent areas (Power+ For the People, 2017).

Part of the Obama administration's Power+ Plan gave the Appalachian Regional Commission a \$70 million increase in its budget through the Power Initiative (Appalachian Regional Commission, 2016, February). The Appalachian Regional Commission or ARC as it is more commonly known is a federal-state agency created "...to address the persistent poverty and growing economic despair of the Appalachian Region" (Appalachian Regional Commission, n.d.a). The plan was initially ignored by Republicans in Congress as it became a partisan issue and the proxy for diversification vs. coal (Sadasivam, 2015). Jason Walsh, a senior policy advisor in Obama Administration's Domestic Policy Council recalls, "When we included the proposal, no Republican member of Congress was willing to touch it at first," (Higdon, 2017). Eventually, and likely because of the building pressure from grassroots manifested local resolutions in support of the Power+ Plan, 14 of which were in his district, Republican Hal Rogers, the chair of the powerful Appropriations Committee from Kentucky, introduced the RECLAIM Act. The RECLAIM Act is a portion of the Power+ Plan which authorizes an early release of Abandoned Mine Land funds for "...economic revitalization, diversification, and development in economically distressed communities through the reclamation and restoration of land and water resources adversely affected by coal mining carried out before August 3, 1977..." (U.S. House of Representatives Natural Resource Committee, 2017). After sitting in committee for over a year, the RECLAIM Act passed the House Natural Resources Committee (U.S. House

of Representatives Natural Resource Committee, 2017). The National Mining Association, a lobbying organization for the coal industry, opposed the bill and instead offered a position of eliminating the existing abandoned mine land tax on coal production (Quinn, 2017).

The choice of coal vs. diversification was presented as an election choice in the 2016 presidential election.

Higdon (2017) reports,

On March 13, 2016, Hillary Clinton fell irretrievably down the mine shaft of the War on Coal when she was asked why poor white people should vote for her. Her response: ‘I’m the only candidate which has a policy about how to bring economic opportunity using clean renewable energy as the key into coal country. Because we’re going to put a lot of coal miners and coal companies out of business, right?’

Although Clinton continued her answer to outline a series of measures to help coal communities transition, the soundbite stuck. Meanwhile, at a May 5 rally in West Virginia, candidate Trump, donning a miner’s hard hat, promised, “We’re going to get those miners back to work... And for those miners, get ready, because you’re going to be working your asses off” (Eblen, 2016).

Coal and the question of continued political support for its existence in the national energy future was arguably a prominent determinant in the margin of victory for states that are coal-dependent in the 2016 presidential election. President Donald Trump won 68 percent of the vote in West Virginia and defeated Hillary Clinton by 42 percentage points, his 2nd largest margin of victory, behind Wyoming (Wasserman, 2017). In 2015, Wyoming was the top producer of the nation’s coal providing 42 percent, and West Virginia ranked second producing 11 percent (U.S. Energy Information Administration, 2017, February 28). As, coal and President Trump won overwhelmingly in the Appalachian region. Volcovici (2017) states, “Four hundred of the 420 counties ARC operates in voted for Trump in November’s election” (para 8).

The Trump administration’s first proposed budget released in March would have eliminated all funding for the Appalachian Regional Commission (U.S. Office of Management and Budget, 2017, March 16). In response to the proposed elimination of the Appalachian Regional Commission, Mitch McConnell, the Senate Majority Leader stated,

We are not going to allow any cuts to the Appalachian Regional Commission. It is very important to Eastern Kentucky. It has been for a number of years. That’s not going to happen. We probably will reduce the budget for the EPA because they have been involved in a whole lot of activities that I think are beyond our mission. A good example of that is what they’ve done to the coal industry in Eastern Kentucky (WKYT, 2017).

Representative Hal Rogers also rejected the proposal to eliminate ARC (WKYT, 2017).

At the time ARC was created in 1965:

- One of every three Appalachians lived in poverty
- Per capita income was 23 percent lower than the U.S. average
- High unemployment and harsh living conditions had, in the 1950s, forced more than 2 million Appalachians to leave their homes and seek work in other regions. (Appalachian Regional Commission, n.d.a).

While the ultimate fate of the Appalachian Regional Commission is under speculation, the agency received an extension for funding through September 2017 with an additional increase from its FY 2016 budget and a continued line item for the POWER Initiative (Appalachian Regional Commission, 2017, May). The Appalachian Regional Commission (n.d.b) states,

...Appalachia lost nearly 10,500 coal mining jobs in 2016, and a total of 33,500 coal mining jobs between 2011 and 2016... The POWER Initiative supports efforts to create a more vibrant economic future for coal-impacted communities by cultivating economic diversity, enhancing job training and re-employment opportunities, creating jobs in existing or new industries, and attracting new sources of investment. ARC provides POWER implementation grants and technical assistance grants for activities addressing the challenges facing coal-impacted communities in the Appalachian Region. ARC's POWER assistance also includes tools and resources such as technical and capacity-building support (para 2).

Wendy Wasserman with the ARC says the agency is using Power Initiative funds in projects that include “teaching coal miners how to code, helping develop agricultural activity on former coal land, and training folks who would have been tracked into coal into solar installation or construction” (Godfrey, 2017).

While the Appalachian Regional Commission has helped to make some marked improvements in Appalachia’s economy, there are considerable questions about the agency’s effectiveness. While eliminating the agency and the tens of millions of dollars that come back to Appalachia through the federal government would be devastating—especially during this time of economic transition—it should not overrule scrutiny. The region has historically suffered with the lowest wages, lowest education level, highest unemployment, worst housing quality, highest infant mortality rates, and poorest access to transportation and communications systems of any region in the United States (Center for Regional Economic Competitiveness & West Virginia University, 2015). Despite the public investment of over \$25 billion in the last 50 years through ARC, Appalachia continues to fall behind in every respective category compared to national averages (Center for Regional Economic Competitiveness & West Virginia University, 2015).

Findings later discussed suggest improving how ARC and economic development function in Appalachia is imperative to regional success.

Coal Dependency in Appalachia

It is important to note, and this is the purpose of undergoing this research, that resource dependency, primarily coal mining, is not lucrative for mining communities or even an economically sustainable situation in Appalachia. Many researchers have come to conclude the opposite—the dependence on one extraction industry, while beneficial for a select few, has actually negatively affected the economy in Appalachia.

Partridge, Betz & Lobao (2013) found poverty was more strongly associated with coal mining in Appalachia than mining regions in the rest of the nation. Santopietro (2002) compared coal-mining areas to other areas in Appalachian states and found that even with increases in coal mining productivity, coal dependent areas did not reach economic growth or income levels of surrounding areas. Deaton and Niman (2012) used a fixed-effects regression approach for 399 Appalachian counties over 40 years and found that mining employment increases can have a short-term effect on the poverty rate, but in the long-term poverty rates increased in coal-dependent counties. Deaton and Niman (2012) attribute this finding to the potentially limited investment in human capital which can potentially affect a community's ability to adapt to different industry sectors over time. Black, McKinnish, & Sanders (2005) further explore the relationship between human capital and poverty in coal-dependent Appalachia between the 1970's and 1980's and find that high-school drop-outs earn more during coal boom years but then earn less during bust years and high school enrollment rates reflect these cycles with negative long-term effects.

Hendryx & Ahern (2009) state,

Coal mining regions have higher unemployment and poverty rates compared with the rest of Appalachia or the nation, and this economic disadvantage appears to be a contributing factor to the poor health of the region's population. Areas with especially heavy mining have the highest unemployment rates in the region, contrary to the common perception that mining contributes to overall employment. The weakness of local coal-dependent economies is also evident from census data showing that migration has resulted in population loss from mining areas relative to non-mining areas. For example, coal mining counties in West Virginia experienced a mean net loss of 639 people to migration between 1995 and 2000, compared with a mean net migration gain of 422 people in non-mining counties (See Figure 2.1).

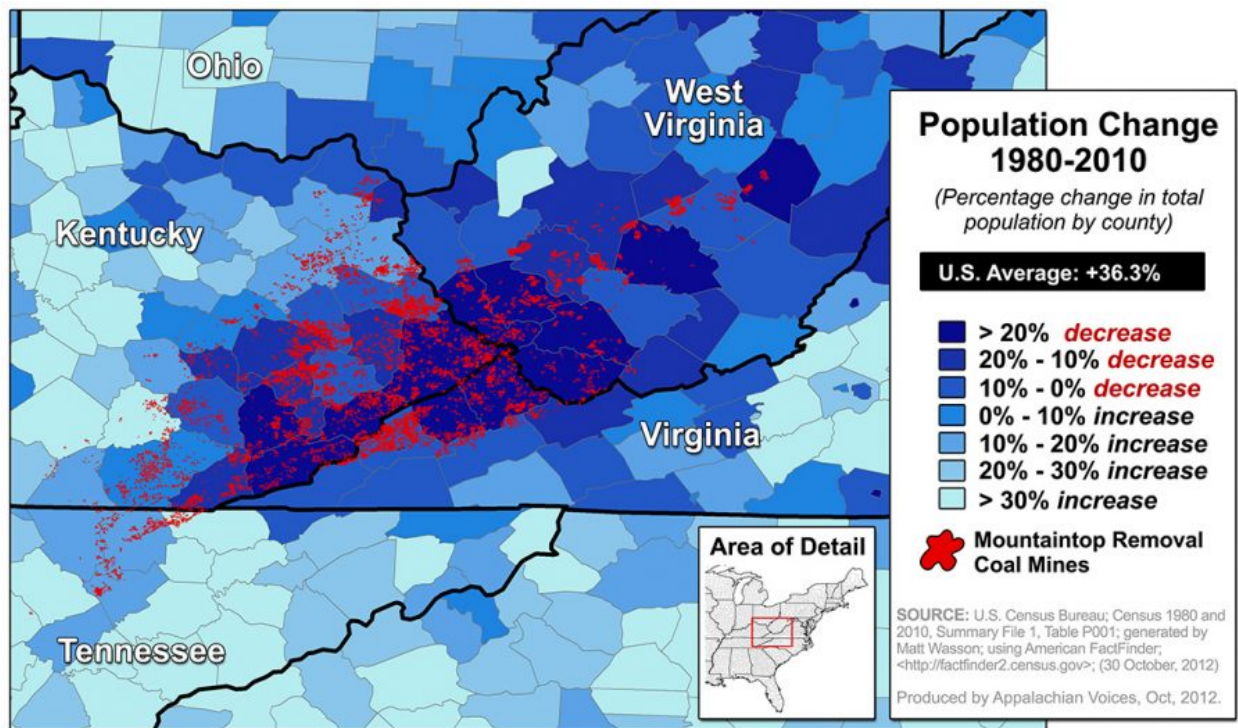


Figure 2.1- Coal Mining & Population Change (1980-2010)

(Appalachian Voices, 2012)

Future of Coal in Appalachia

Communities in Appalachia have long existed to supply the United States with coal as an affordable energy source and as a major export in the global economy (Lewis, 1978). Coal seams that were once tapped underground in the late 1800's and 20th century have steadily decreased in supply. This saw a transition from underground mining to strip mining which involved heavy machinery and less workers to strip or cut away the sides of ridges to access coal seams that were difficult or dangerous to access through underground mining. Surface mining production outpaced underground mining production nationally. These changes saw a steady increase in production with a corresponding decrease in employment since the 80's (See Figure 2.2). The number of U.S. coal mine employees continued declining in 2014 by 6.8 percent from the previous year reaching the lowest average since 2004 though productivity by employee increased by 7.6 percent per hour (U.S. Energy Information Administration, March 2016).

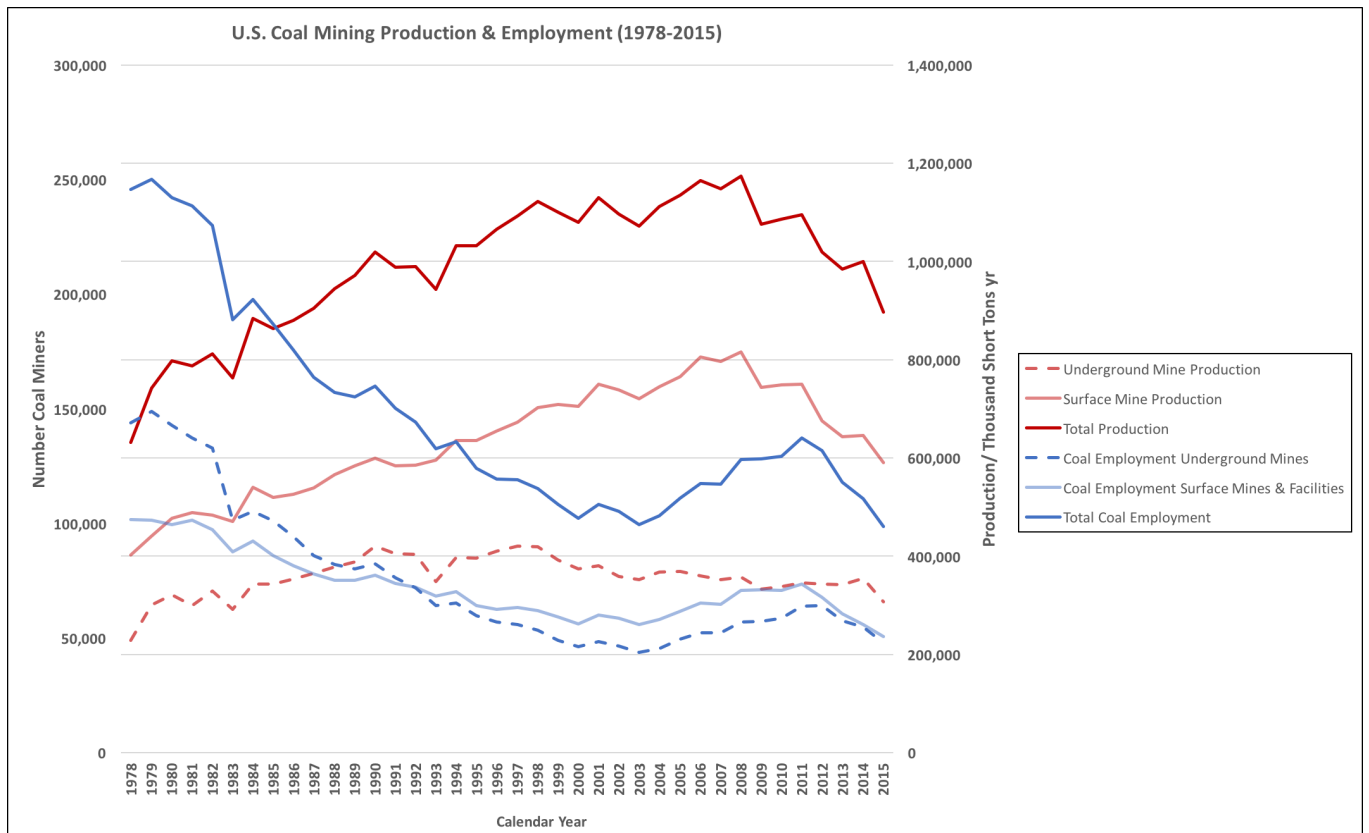


Figure 2.2- U.S. Coal Mining Production & Employment (1978-2015)

(Author generated chart from U.S. Department of Labor, Mine Safety and Health Administration, n.d.)

Appalachian coal competes in the national market as well, and coal from the Western region of the country has been more competitive since the 1990’s because of Clean Air Act provisions as well as deregulations of railroads making it cheaper to transport (Cicala, 2016). The Western Region has a non-union workforce and relies almost entirely on surface mining with heavy machinery to remove coal from much larger coal seams making productivity over five times greater than Appalachian coal (See Figure 2.3; Marley, 2016).

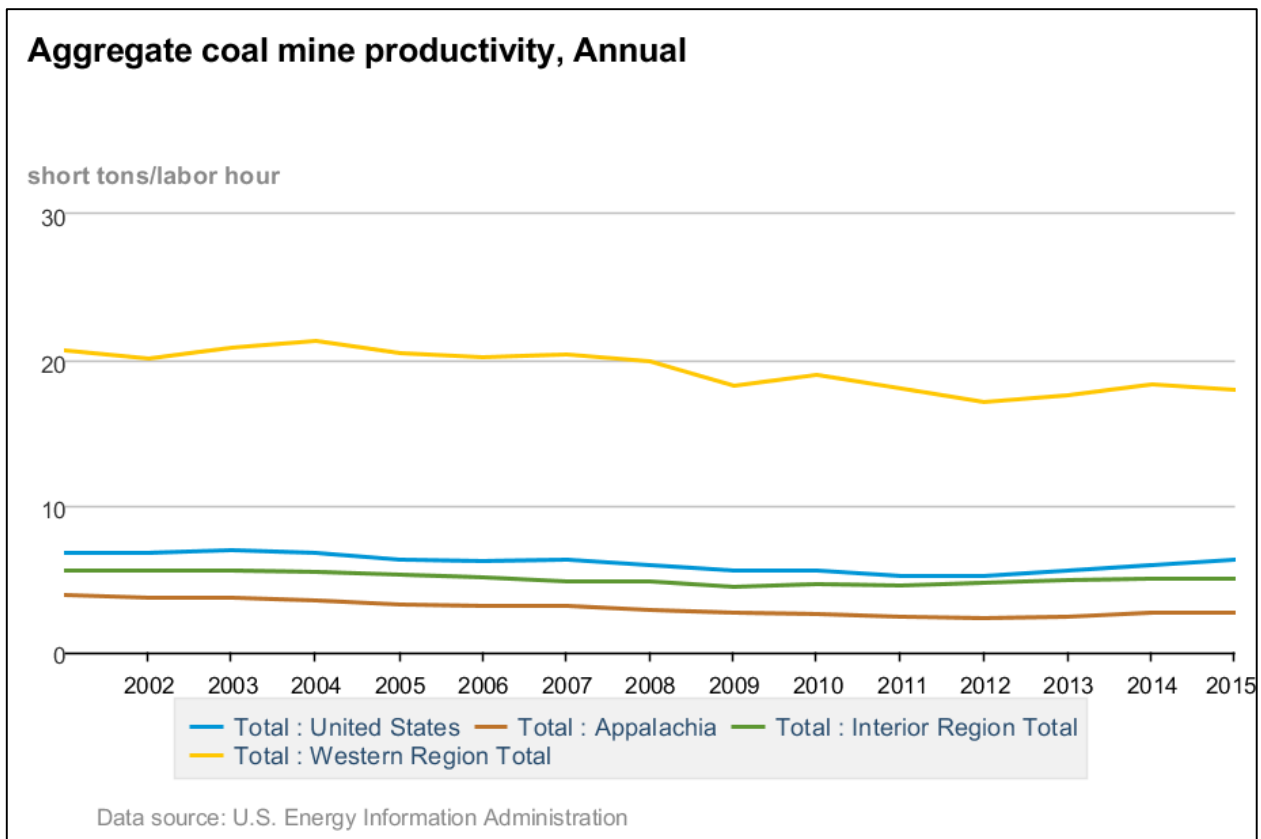


Figure 2.3- U.S. Coal Mine Productivity by Region (2001-2015)

(U.S. Energy Information Administration, 2015b)

McIlmoil and Hansen (2009) state,

The decline in labor productivity implies that Central Appalachia is becoming increasingly more costly to mine, and therefore that the most accessible, lowest-cost coal reserves are being mined out. This may be the greatest challenge to future coal production in Appalachia (p.3).

By 2011, the Powder River basin accounted for 44 percent of national coal production, while all of Appalachia’s coal production accounted for 29 percent (McIlmoil, Hansen, Askins & Betcher, 2013). The U.S. Energy Information Administration (March 2016) reports, “Only the Appalachian region showed a decline in coal production, while both the Interior and Western regions increased their production in 2014” (p. vii). As of 2015, the Powder River Basin in the West has 7 billion tons in recoverable coal reserves at producing mines while Central Appalachia has 1.3 billion (U.S. Energy Information Administration, 2015b). These are factors heavily dependent on the market and less dependent on policies which are likely not to change in the future.

While environmentalists and the Obama Administration are often blamed for the loss of coal jobs, a more prominent factor is the climb of natural gas as aged coal-fired power plants are retired and new natural gas plants are built to replace them as a cleaner and cheaper energy source. Natural gas production in the United States reached a record high in 2015 as prices became more competitive (U.S. Energy Information Administration, April 15, 2016). Globally leaders are focused on climate change. Because the burning of coal is the single largest contributor to greenhouse gases, global demand for coal is declining and energy distributors are phasing out coal from their portfolios. Scientists say we have so many years to stop contributing to carbon emissions in the atmosphere before significant changes will make certain parts of the world uninhabitable. If the carbon limit is breached beyond a certain threshold, it is questionable whether any part of the world will be inhabitable. This caused world leaders to form the Paris Agreement to curb carbon emissions globally (United Nations, 2016). Every country that signed onto the agreement is doing what it can to cut emissions, and as the burning of coal for electricity is the single largest contributor, the demand for it has decreased significantly with future prospects of another boom becoming substantially more unlikely. For example, in the world market, India, which went on a coal-fired plant building spree, is now investing in solar to a degree that it will likely rely on solar for all additional power needs in the future (Anand, June 2, 2017).

The U.S. Energy Information Administration (2017, May 19) states,

Coal production peaked in 2008 and trended down through 2016. Coal production in 2016 was about the same as production was in 1977. The primary reason for the general decline in coal production in recent years is the decrease in coal consumption for electricity generation. Natural gas production in 2016 was the second largest amount after the record high production in 2015. More efficient and cost-effective drilling and production techniques have resulted in increased production of natural gas from shale formations (See Figure 2.4).

Renewable energy overall also peaked in 2016 with wind and solar components' production reaching record highs (U.S. Energy Information Administration, 2017, May 19). While market forces have changed, coal-fired power plants are reaching retirement age (See Figures 2.5 & 2.6). Consequentially as part of future energy portfolios, generators and distributors are replacing retired coal-fired power plants with natural gas, wind, and solar energy (See Figure 2.7).

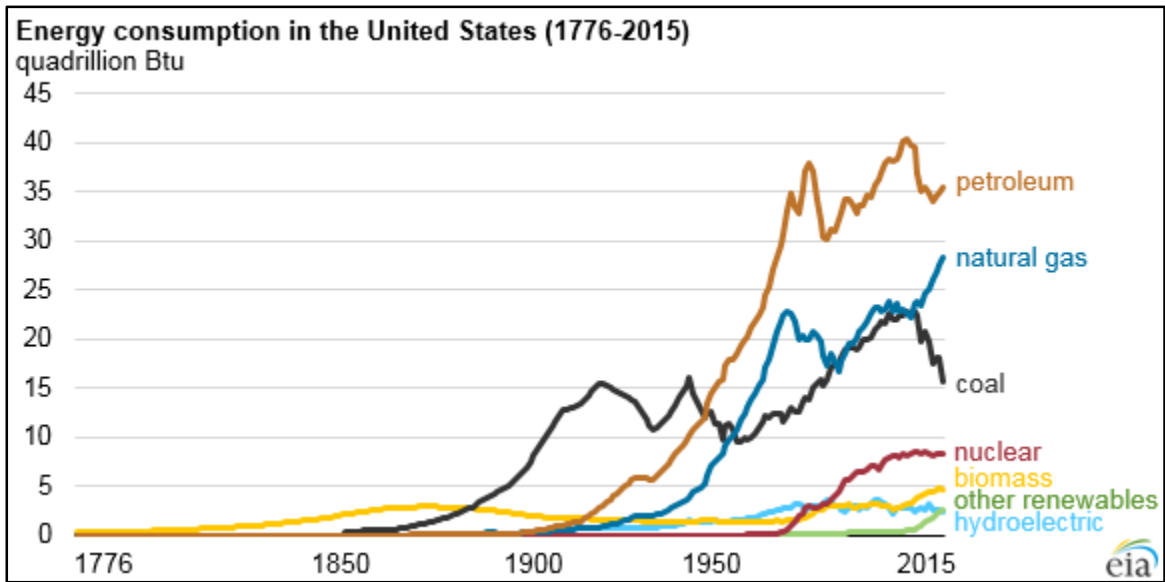


Figure 2.4- Energy Consumption in the U.S. by Source (1776-2015)

(U.S. Energy Information Administration, July 1, 2016)

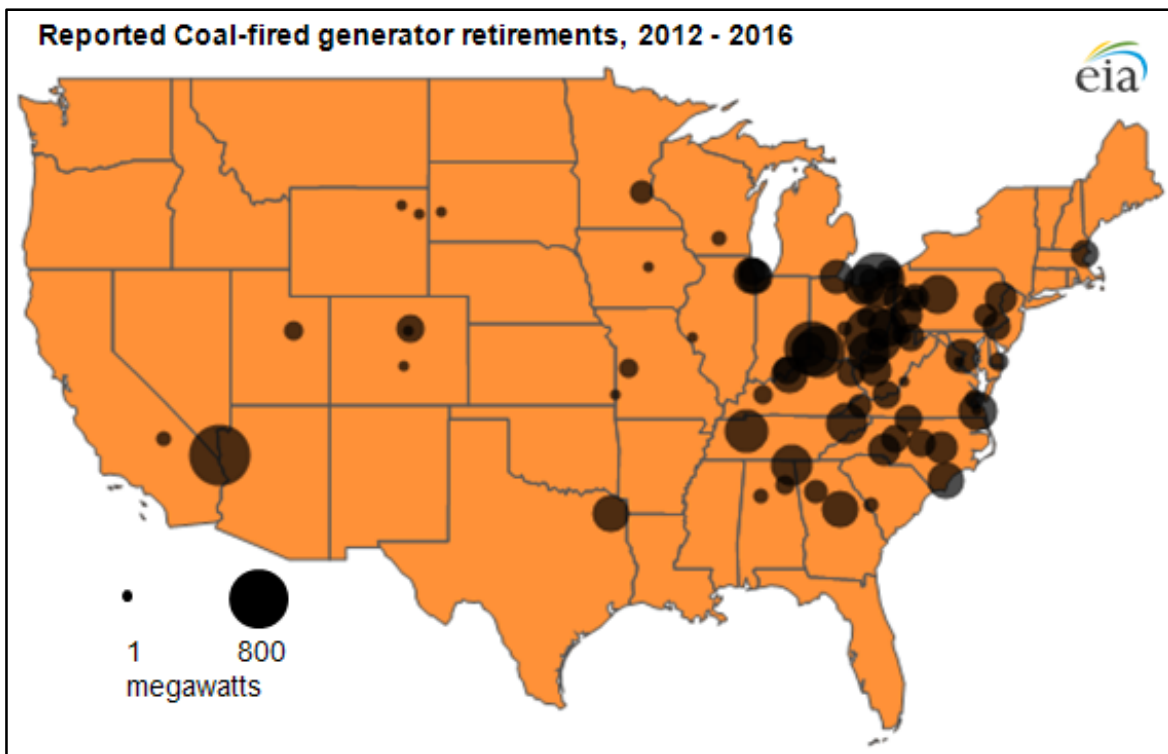


Figure 2.5- U.S. Coal-fired generator retirements (2012-2016)

(U.S. Energy Information Administration, July 27, 2012)

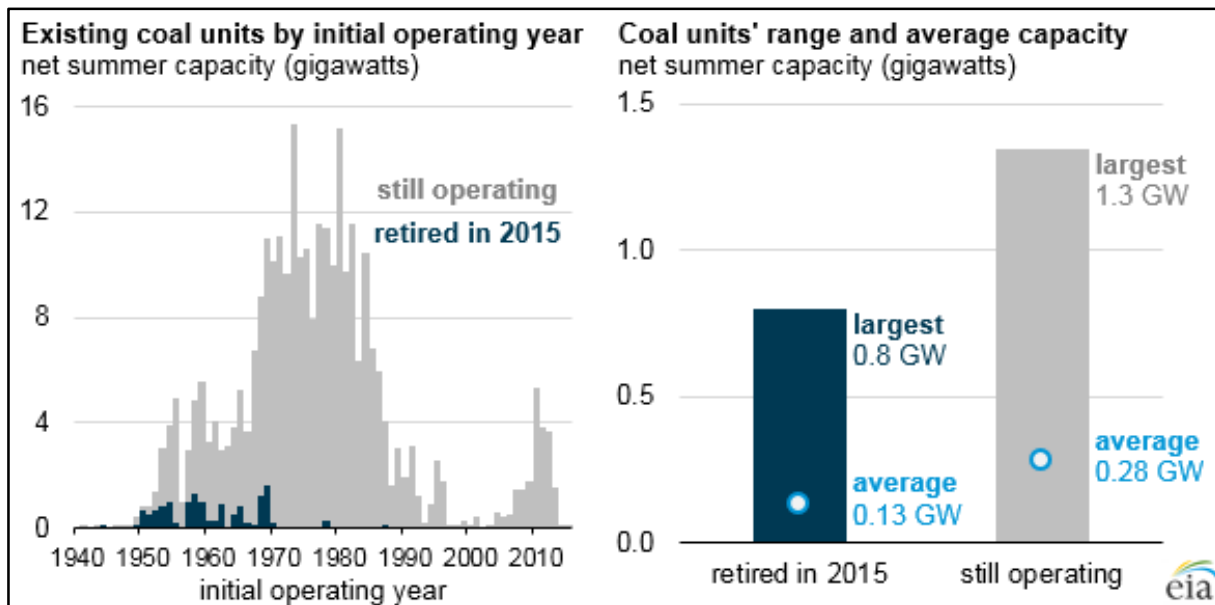


Figure 2.6- U.S. Existing Coal Generator Infrastructure (1940-2015)

(U.S. Energy Information Administration, March 8, 2016)

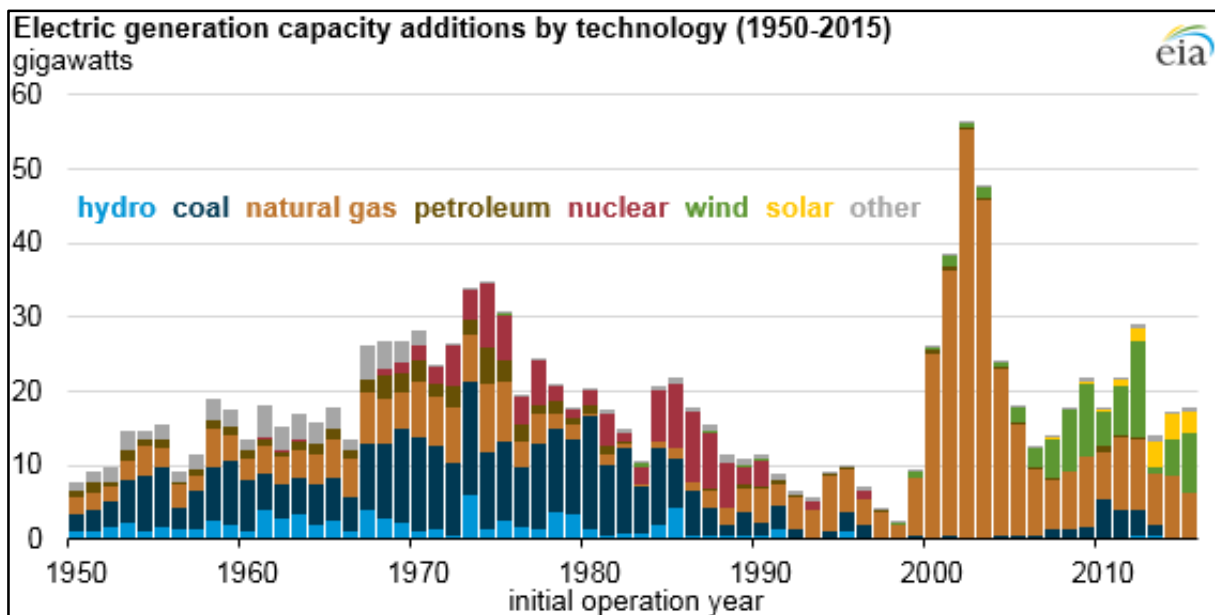


Figure 2.7 - Electric Generation Capacity Additions by Technology (1950-2015)

(U.S. Energy Information Administration, March 18, 2016)

Approaches to Diversification

As the prospects for Appalachian coal-dependent communities to recover with a coal are ever more limited by future energy forecasting, the Appalachian region must undertake a large-

scale and town-by-town diversification process away from coal-dependent or coal-driven economic planning. This study examines the potential for communities to move forward by investing in existing assets to diversify their economic base. Concentrated absentee landownership for the primary pursuit of coal and secondary pursuit of other natural resource extraction are a distinct problem in the Appalachian region. The infamous PAR Appalachian land ownership study by the Appalachian Land Ownership Taskforce (1981) found “absentee owners in the coal counties own 72 percent of the land in the survey, and 89 percent of the mineral rights” (p. 140). The study attributed lack of economic diversification to the trend of absentee ownership by way of moving financial capital created from the sale of natural resources outside of the region so that economic development proved difficult (Appalachian Land Ownership Taskforce, 1981). With the depletion of coal and less dependency on mining as the primary employer in Appalachia, many communities are now holding the reigns of economic development for the first time.

In its temporal progression in assessment of the ailments which render Appalachia unhealthy in economic and societal terms, the literature stops short of offering a model for diversification to ultimately affect community well-being. Gutierrez-Montes, Emery & Fernandez-Baca (2009) in their review of Community Capitals Framework as a people-centered approach recognize it as an answer to “... the failure of past approaches in addressing both the upswing in poverty and the degradation of the environment” (p. 107). While coal mining is the industry that has made the Appalachian region part of the national and global market and therefore been its predominant identifier on a national level, many more assets exist.

The focus of this thesis will be on the effects of resource dependence, the trend of development in Appalachia, and the outlook for the future as it relates to community developers’ activities. This will be understood, as much as possible, through the eyes of a community directly affected by the legacy of coal mining dependency. As research on coal mining in Appalachia is ubiquitous, and there is even some research regarding development in Appalachia, this research takes a different approach by examining a specific community’s long history and struggle to engage in diversification and development. In undergoing this research, I learned that this story is actually more common across Appalachia than the existing research literature would lead one to believe. Most of it was grassroots and community-driven. It wasn’t hosted by large non-profits and therefore neither the mechanism to publish it to the world nor the benefits were readily accessible to these heroes of Appalachian dreams.

There was a movement for diversification called a “Just Appalachian Transition.” This term which had been around for about a decade previously coined by Mountain Association for Community Economic Development (MACED) and partner organization Kentuckians for the Commonwealth (KFTC) gained new momentum and regional adoption as the market outlook for coal dimmed in light of the coinciding of natural gas’s price competition with coal and environmental regulations to curb carbon emissions (Biggers, 2011).

Private foundations also started funding economic diversification work in Appalachia at a new level. Mary Reynolds Babcock Foundation co-founded the Appalachia Funder’s Network and has their own Appalachian Transition Fund (Mary Reynolds Babcock Foundation, 2012). The Appalachian Funder’s Network was created in 2015 and has \$450,000 “to rapidly award capacity building grants to help coalfield and coal plant-impacted communities better prepare for economic transition and compete for the Federal POWER Initiative grants” (Coulter, 2015, para 1).

Many organizations used the influx of financial capital promised by the POWER Initiative and supporting foundation grants to create fundable projects that offered solutions for diversification of coal-dependent communities. While some of those organizations already operated as member-based or member-run, the recruitment of those members was often centered on environmental issues. There was often overlap in that many of the people who joined these organizations like Statewide Organizing for Community eMpowerment (formerly Save Our Cumberland Mountains/ SOCM) in Tennessee, Kentuckians for the Commonwealth (KFTC), United Mountain Defense (UMD), Blue Ridge Environmental Defense League (BREDL) and so many others also wanted to see more sustainable economic development. But, because of the nature of the organizations’ founding, people often leaned environmental and were removed to several degrees from the coal industry. From the beginning, the economic development work left many community members outside of the spectrum of influence or unintentionally marginalized from the new economic development opportunities being voiced. In addition, the organizations were more accustomed to organizing and advocacy and less informed about possible community development practices. This learning curve had the effect of staff people attending meetings that might otherwise be populated by community members because they saw the chance for renewable development. I saw that it was possible, when financial capital possibilities are introduced, communities of place can be left out of the negotiation process. Human, social and political capital can be outsourced to regional or local non-profit staffers limiting the lasting and

sustainable effect of development. Non-profit staffers become the technical experts and the pattern of economic development exercised for over a century in Appalachia by experts and absentee interests can again occur. One organization, Appalachian Voices, held a set of community forums to elicit feedback from coal-dependent communities in Southwest Virginia. The forums were well-publicized and local officials as well as community members attended. I attended one such forum with about 20 people. The group was representative of the population with a diversity of ages, races, sex and political and environmental leanings varied as expressed through contributions throughout the workshop. Local government officials were also present. I sat at one table with some people that had not previously been affiliated with the organization or attended any of their events. Some of them wanted to see coal come back. Because of the tense history between coal miners and environmentalists in Appalachia, bringing everyone to the table and including their input is a difficult balancing act.

Tennessee Coal Mining

While West Virginia and Eastern Kentucky have been the highest producing states in Appalachia and are often highlighted in much of the research and news stories when discussing coal in Appalachia, portions of Tennessee experienced an earlier decline in coal production and employment loss. Exploring this area more closely might give us an indication of what diversification looks like in Appalachia. As the readily accessible and market competitive coal has been depleted in much of Tennessee and expectations for air pollution controls have manifested through tighter regulations on coal-fired power plants, coal in Tennessee saw a declining share of the energy mix for the national power supply. McIlmoil, Hansen & Boettner (2010) state,

The Clean Air Act Amendments of 1990 impacted demand for high-sulfur Tennessee coal, and total production declined by 52% between 1990 and 1993. Underground mining was most negatively impacted, accounting for 81% of the total decline in production. Since then, total production levels have fluctuated around 3 million tons; however, since 2005, annual coal production has dropped by 884,000 tons, or 27% (p. 3)

The coal industry in Tennessee followed regional and national trends by expanding surface mining and mountaintop removal to access the thinner coal seams and decrease cost of production to compete in national and global markets resulting in a steep decline of employment over the years (see Figure 2.8). In 2013, Tennessee ranked 21 out of 26 coal producing states in

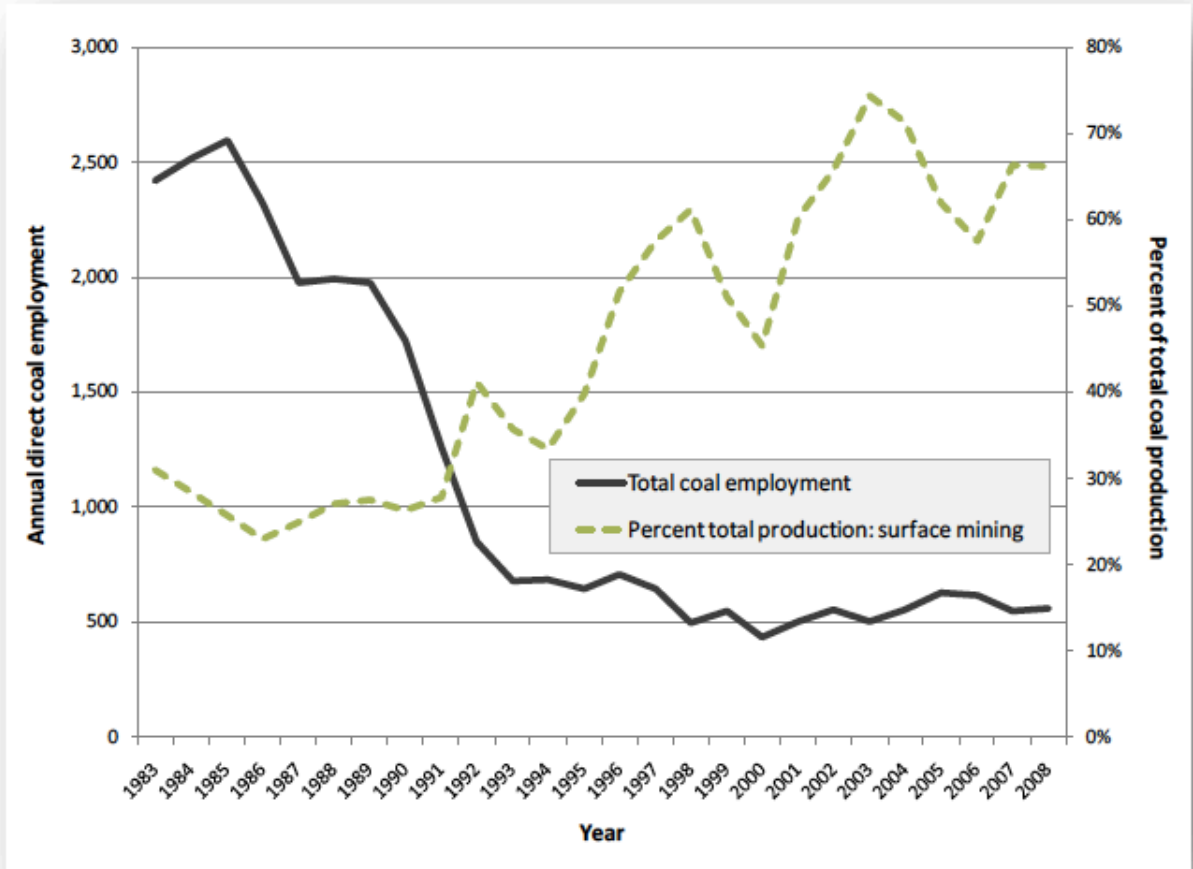
the nation (Office of Surface Mining, 2014). Production in the state has decreased 43 percent since 2003 (Office of Surface Mining, 2014).

The U.S. Energy Information Administration (March 2016) documents 7 mines in the whole state in 2014—3 underground and 4 surface. From 2013 to 2014, coal production in Tennessee decreased by 23.6 percent. National coal production was up by 1.5% for the same period though the number of producing mines fell by 7.2%.

All coal coming from Tennessee is sold on the open market to coal companies or consumers, and is not exported, which is how the majority of coal is sold in the US (U.S. Energy Information Administration, March 2016). McIlmoil, Hansen & Boettner (2010) state,

As of 2008, only 558 direct jobs existed in the coal mining industry in Tennessee, 470 of which were actual jobs mining coal. Approximately 300 of those were jobs at surface mines. This is the result of the continuous expansion of surface mining, which has grown from a low of 23% of total production in 1986 to over 66% by 2008 (MSHA, 2010).

Recently, and as demonstrated in Figure 2.9, overall coal mining has decreased in the state, underground mining has accounted for a larger percentage of production (Murray, Sims, Davis & Kim, 2015). In Tennessee, the Division of Mining within the Department of Labor, maintained records of mining employment and production by the ton since the beginning of the 20th century. As shown in Figure 2.10, coal mining employment in Tennessee has trended down since the 50's with only small upticks in employment. The National Mining Association (July 2014) reported that annual coal mining wages in Tennessee were \$64,207 in 2013, which is above the average for all industries at \$44,273. All mines in Tennessee are non-union (U.S. Energy Information Administration, March 2016).



Source: MSHA (2010).

Figure 2.8- Coal Employment & Surface Mining (1983-2008)

(McIlmoil et al., 2010, p.27)

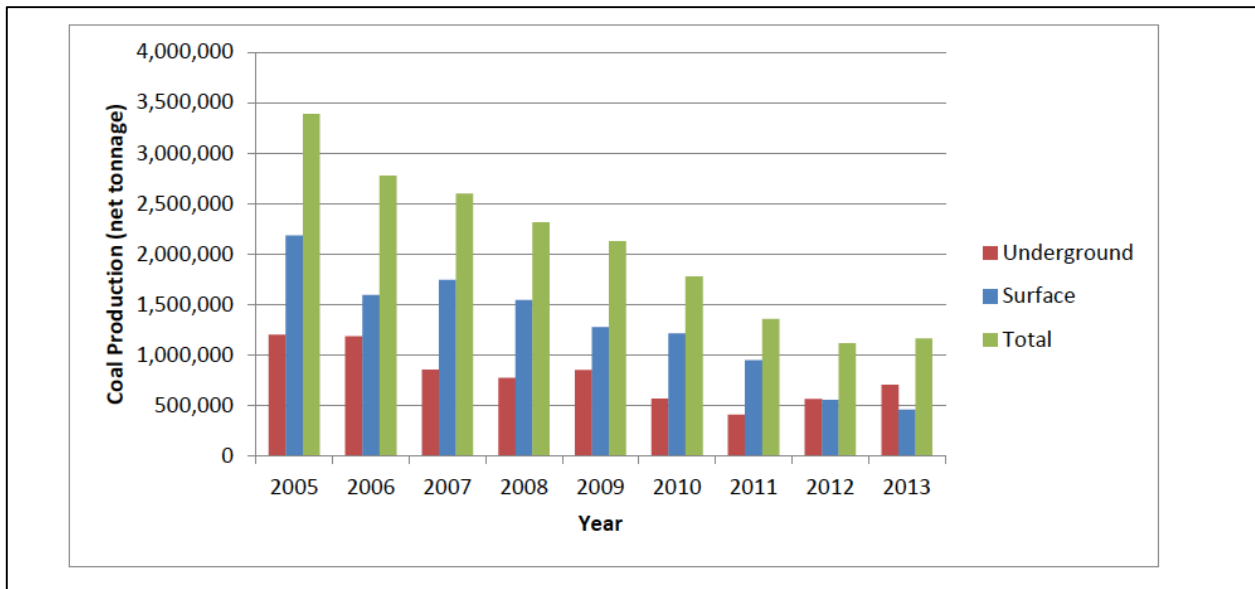


Figure 2.9- Tennessee Underground & Surface Coal Mining (2005-2013)
(Murray, Sims, Davis & Kim, 2015, p.33)

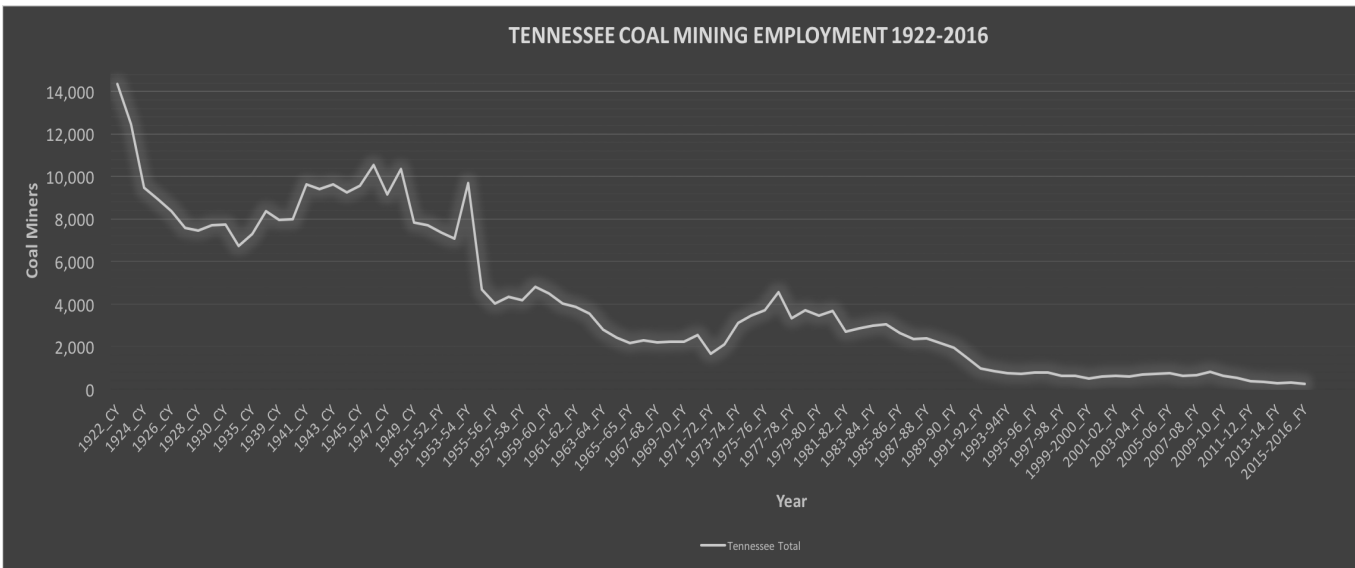


Figure 2.10 - Tennessee Coal Mining Employment (1922-2016)
(Generated from Tennessee Department of Labor reports 1922-1982 and MSHA 1983-2016)

History of Coal-Dependency in Clearfork Valley

This research follows a well-organized community collaboration in the Appalachian mountain region that is struggling to tackle distress due to the historic economic dependence on coal mining and the industry’s continuing decline. The case study community is Clear Fork Valley between the Cumberland and Pine Mountains of Tennessee and Kentucky (See Figure

2.11). The valley's namesake, Clear Fork Creek flows through Whitley and Bell Counties in Kentucky and Campbell and Claiborne Counties in Tennessee (U.S. Geological Survey, 1979).

Gaventa (1980) used this same area as a case study in his book *Power and Powerlessness: Quiescence & Rebellion in an Appalachian Valley*, which examines the relationship of power and explores why the people of the valley were not actively engaging to shift the political and industrial realities in which they lived under grave inequality.

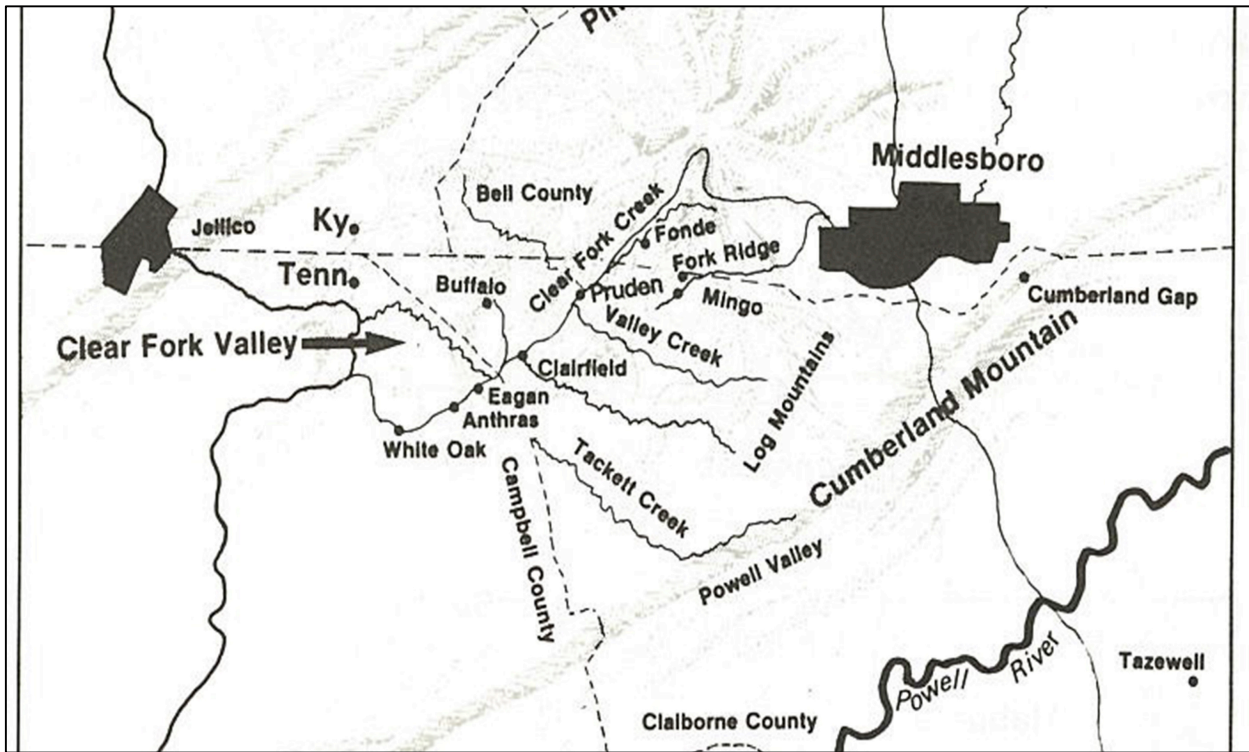


Figure 2.11 - Map of Clearfork Valley

(Gaventa, 1980, p. 34)

The Industrial Revolution and Extraction in Clearfork Valley

Gaventa (1980) documents the steady acquisition of land in Clearfork Valley by the British coal company American Association Limited beginning in the late 1800's. As land was plentiful, many owners did not place a high monetary value on it or would trade their bountiful supply for items such as rifles (Gaventa, 1980). The company would also secure land through one heir and then through the aid of local courts purchase the partitioned property at auction (Gaventa, 1980, p.54). Gaventa (1980) states, "Residents recount, still with anger, how some of the mountaineers were burned out if they would not sell" (p.54).

Bubka (1973) states,

The World War I years created limitless need for coal, and consequently huge profits awaited those who undertook to exploit coal developments. Coal outputs in 1918 surpassed all previous levels of production when 346,540,000 tons were mined. Production figures for the years between 1913 and 1918 are equally impressive. In that brief five-year span, 2,960,938 tons of coal poured out of the pits; this was equivalent to approximately 33 percent of all the coal mined in the United States since 1807. Much of it came from new mines in the southern coal fields which were opened to supply the needs of expanding industry (p.253).

In 1920, only two mines were operating in Tennessee and both were non-union (Bezanson, p.205). By 1921, 34 mines were operating and half were union (Bezanson, p.205).

Gaventa (1980) states,

The importance of South Central Appalachian coal to the national economy increased during the 1920's, though on a national level the coal market was generally down. The lack of uniform wage standards, the general lack of unionization in the Appalachian region, and the favorable long-distance haulage rates given by the railroads, allowed the southern operators of Kentucky, Tennessee, West Virginia and Virginia essentially to corner the coal market. In 1922, for instance these non-union fields provided about 22 per cent of the total bituminous coal output; by 1930 they were providing 80 per cent. Though production was increasing, the miners' demands were not; in fact, union strength was on the decline (p.85).

Obenauer (1925) states,

Because the coal seams in these States run into places remote from normal population centers, much of the mine-workers—two-thirds to four-fifths – are living in company controlled communities, upon which, as a consequence of their remoteness, the mining population must depend on the necessities and the accessories of civilized life (p.139-140).

Willits (1925) states,

Thus it appears that each mine or group of mines became a social center, with no privately owned property except the mine, and no public places or public highways except the bed of the creek which flowed between the walls... There are no public corporations in many places to provide for the public welfare or to maintain law and order, so the mine owner had one of his employees deputized by the sheriff, and thus there came into existence the much discussed 'mine guard.' As the employees were the only ones who were furnished homes and their occupancy was contingent upon their employment, the courts of the state have decided that the relations of landlord and tenant did not exist, but that it was the relation of master and servant and when the employment ceased the mine owner came into possession of the house.

Thus the position of the miners in company-owned houses is anomalous. They are not tenants and have no more rights than a domestic servant who occupies a room in the household of the employer (p.236).

The short-lived U.S. Coal Commission generated a 400-page exhaustive study of mining conditions and market analysis in the country. It recommended not nationalizing the mines and profit-sharing of workers. Tax recommendations were based on profits of the company which could be easily circumvented by forming separate companies. Complete unionization was not recommended and generally a reflection of self-regulation of the industry and voluntary cooperative agreements between the industry and the workers was recommended with federal oversight (Hunt, 1925, p.404-406).

Depression Era Bust Cycle and Unionization

As the Great Depression took hold, coal markets changed overseas with an oversupply of coal and mechanization of the industry was requiring less workers, and in Clearfork Valley wages were cut to the point of starvation (Gaventa, 1980). The United Mine Workers organized in the area but couldn't ultimately support the strike given the national momentum of strikes and people in the valley were not only losing their minimal wages but their homes as well. The miners regrouped with other unions such as the National Mineworkers Association and the Wobblies with many other organizations providing food assistance and other services. Eventually the strike was quelled as Gaventa (1980) records in detail the instances of murder of reporters, beatings of outside union organizers through the force of local sheriffs and the spin of local newspapers (see Appendix C). An outsider/ insider mentality was communicated about the union organizers calling them communists and any supportive newspaper publication was deemed as such as well.

Ross (1933) states,

The coal companies own the land. For the use of it the mountaineers cannot pay rent, since they raise no money crops. Nor can they remain for long in dependence on another man's soil. In the minds of many people in the region is the question whether the land owners should not return some of the surface rights to the miners. The main barrier lies in those share-holders in land companies, people who have never seen their property and so suppose that they might be giving away something of value by releasing the surface rights (p.236).

Things changed as data was collected through President Hoover's Emergency Committee for Employment asked the Children's Bureau to make surveys in mining communities. With the Children's Bureau, Bradbury (n.d.), states,

Long before 1929, the depression had come to the mining villages. The use of machines in the mines threw men out of work and carried widespread unemployment beginning as early as the mid-twenties. The Children's Bureau studies showed that child labor meant

less time and slower progress in school. In the coal mining district only 17.4 percent of the working children completed the eighth grade...All of these county studies presented variations on the same unhappy theme. The resources for relief of the suffering in these communities—in many of which unemployment had been regarded as serious as early as 1927 and had reached unheard of proportions by 1931—were few and entirely inadequate. If hunger and further evictions were to be prevented, outside assistance was imperative—without such assistance suffering would be intense.

The Children's Bureau was the first agency to link property taxes with socioeconomic outcomes. Grace Abbott (1932), Chief of the Bureau, states,

It seems clear, also, that reliance on a general property tax for the support of local services in the states places an unfair burden on the farmer and small home-owner and enables many of the very rich to avoid payment of a just share for the support of these community services...In these coal-mining communities there will still be a serious problem of unemployment after this industrial depression passes... With the general use of new mining machinery, the oversupply of miners, estimated at 200,000 before 1929, will be greatly increased. What mines will survive the years of depression end and of reorganization which are before us none can say. A program of vocational rehabilitation and assistance in securing work in other localities is clearly needed. Such a program requires resources and experience such as these rural counties cannot hope to supply. The present crisis has given us a dramatic demonstration of the fact that we are trying to meet modern social and industrial conditions with a system of poor relief which in many states has been little modified since colonial times. It is clear that a policy of drift instead of social planning will be costly in money and social values (p. 221).

Abbott's comments would hold true today. She also predicted the need for a large-scale federal influx of funding and vocational rehabilitation. This is the same type of program the federal government is considering now called the POWER Plus Plan some 84 years later.

After President Roosevelt came into office and workers' rights were written into law, locals re-organized with the United Mine Workers after some internal battles for local control with their own elected union representative. They made steady gains in rights over the years but the land remained in the hands of the absentee corporations.

Claiborne County, Tennessee is indicative of trends in coal-dependent Appalachian communities. The county had a population of 32,213 as of the 2010 census with an estimated population change of - 1.5% from 2010 to 2012 (U.S. Census, 2013). This is a marked change from the previous 10 years when Claiborne County had a growth rate of 7.9% from 2000 to 2010 (Gustafson, n.d.). A major reason for the need for economic transformation is due to the reliance on coal mining and other industries from outside the area which resulted in the exportation of valuable resources and now labor. What follows is a brief history of employment in the county. The East Tennessee Development District (ETDD) (2012) reports,

Between 1950 and 1960, the county's population declined by 23.1 percent...This was the largest proportional population loss experienced by an ETDD county during the decade. This decline can largely be attributed to the decline of the coal mining industry forcing unskilled workers out of the area to look for employment. Agriculture-forestry-fisheries-mining employment declined from 66.7 percent to 43.5 percent, but remained the predominant employer of the county's labor force...Between 1970 and 1980 the population increased by 26.6 percent...the county's largest gain in any decade from 1950 to 2010. Manufacturing remained the largest employer for the work force, accounting for 26.8 percent...Between 1990 and 2000, the population increased by 14.3 percent...Professional services became the largest employer of the work force, accounting for 36.1 percent... (p.1-2).

Gaventa (1980) states,

During the coal camp era, the company that owned most of the land in the Valley, the American Association, Ltd., had remained in the background of conflict. Other companies who leased the coal, ran the mines, and built the communities had been more visible antagonists. With the closing of the mines in the 1950's the situation altered. The American Association took possession of the homes. Other companies still operated the mines, but they were smaller and less powerful. The American Association, Ltd. emerged even more clearly as the coal and land lord of the Valley. Although the community remained poor, the profits of the Company, derived primarily from rents and royalties, steadily increased. Most of the profits went to the shareholders, the majority of whom were in Britain... "The policy of depopulation was most visibly symbolized as the coal camp houses were torn down and not replaced. More than two-thirds of the company houses were torn down between 1962 and 1972, and the Company has made it clear that more will go. The houses that remain are in extremely poor condition. Leases, if granted at all, are for thirty-day periods. Rent is often collected by an agent with an armed guard. If the people don't like it, they can leave. A memorandum posted on the doors of the stores or the post office, or at the mines, reads, 'No specified reason is needed if the owner desires to have the house vacant...No one is obligated to remain in a house. If he is unhappy about his surroundings he is free to move immediately' ...In Tennessee, the Company has had on its land more strip-mining operations than any other landowner in the state (p. 133).

Banker (2010) states, "Nearly 90 percent of Clearfork's residents out-migrated in the quarter-century after World War II" (p.187).

Ferguson (2015) states,

Tennessee passed right-to-work legislation in 1947; unless a mining company had a contract to supply coal to a consumer who stipulated that it be mined by union labor, most of the new underground and strip mines after mid-century were open shops employing nonunion labor...by the early 1970s only one underground mine still operated under a union contract (p. 84).

Aside from rental struggles families faced in the absentee landholding area of Clearfork Valley, strip mining offered no protection of surface land rights. Mining companies who owned

mineral rights or were leasing them, through the new strip mining practices would physically uproot families (Ferguson, 2015). Lewis, Kobak, & Johnson (1978) state,

Both the family and the church became defensive and reverted inward in order to protect members from the sudden influence which came with the development of industrialization... The family and kinship group became a refuge for its members. The family became more resistant to change and developed sabotage techniques... Family members restrain their members from taking social action. There is little revolt or conflict since one is afraid to disrupt the only remaining refuge (p.131-132).

Appalachian Land Ownership Taskforce (1981) states,

In 1971, a study by three Vanderbilt University students of the five major coal producing counties in northeastern Tennessee found that nine large corporations controlled 34 percent of the land surface, and approximately 80 percent of the coal wealth. Yet, in 1970, they accounted for less than 4 percent of the property tax revenue of these counties (p.39).

John Gaventa (1995) was part of the Vanderbilt Student Health Coalition that undertook the study of five coal-producing counties in East Tennessee to determine who owned the land and what taxes they paid. The citizens took the study and formed Save Our Cumberland Mountains (SOCM) with support from the Vanderbilt Student Health Coalition. Gaventa was going to Britain for graduate school and the citizens asked him to carry the message of inequality to the company that owned most of the land in Clearfork Valley. His research in the following years led to the book *Power and Powerlessness* (Gaventa, 1995, p.2).

The Surface Mining Control and Reclamation Act (SMCRA) was signed into law by President Jimmy Carter in 1977. Two previous bills to regulate the mining industry had been vetoed by President Ford. The Office of Surface Mining Reclamation and Enforcement (n.d.) states, "SMCRA was the first federal environmental statute to regulate a specific industry as opposed to a specific type of pollution." SMCRA created a new office with regulatory powers and the abandoned mine land (AML) reclamation program funded by per ton coal extraction fees "to reclaim land and water resources adversely affected by coal mines abandoned before August 3, 1977" (Office of Surface Mining Reclamation and Enforcement, n.d.). Appalachian groups were active in promoting the need for regulation and abolition of strip mining. In 1968, when the first congressional hearings were held on strip mining regulation and reclamation, the Congress for Appalachian Development, Group to Save the Land and the People, and Sierra Club were able to testify (U.S. Congress, 1968).

Through its review of 80 counties land ownership and taxation patterns, the Appalachian Land Ownership Taskforce (1981) found,

In Tennessee and Kentucky, the J. M. Huber Corporation purchased the 65,000 acres of the American Association, Ltd., a British owned firm formerly controlled by the interests of Sir Denys Flowerdew Lawson, a former Lord Mayor of London. American Association had developed Middlesboro and Cumberland Gap in the 1890's. The largest owner found in the study, Huber owns 227,000 acres in the survey area (p. 88).

McIlmoil, Hansen & Boettner (2010) report,

Since 1985, coal production in Tennessee has fallen by 5.3 million tons of annual production... In 2008, six Tennessee counties produced about 2.3 million tons of coal and employed 558 people. Three of these counties—Claiborne, Campbell, and Anderson—accounted for 98% of total coal production... In fact, as calculated for this report, no county in Tennessee relies on coal for more than 2% of its total employment, and the two counties that have historically produced the most coal—Campbell and Claiborne—are designated as “At Risk” counties by the Appalachian Regional Commission, which reports a poverty rate for both counties at over 180% of the United States average as of [2013] (p.viii-ix)...Claiborne County has 14 abandoned mine lands (McIlmoil et al., p. 39).

Clearfork Valley encompasses all current coal mining in Tennessee and currently has not received any of the support designated to help coal-mining communities through ARC (Appalachian Regional Commission, 2017, June; See Figure 2.12).

U.S. Energy Mapping System

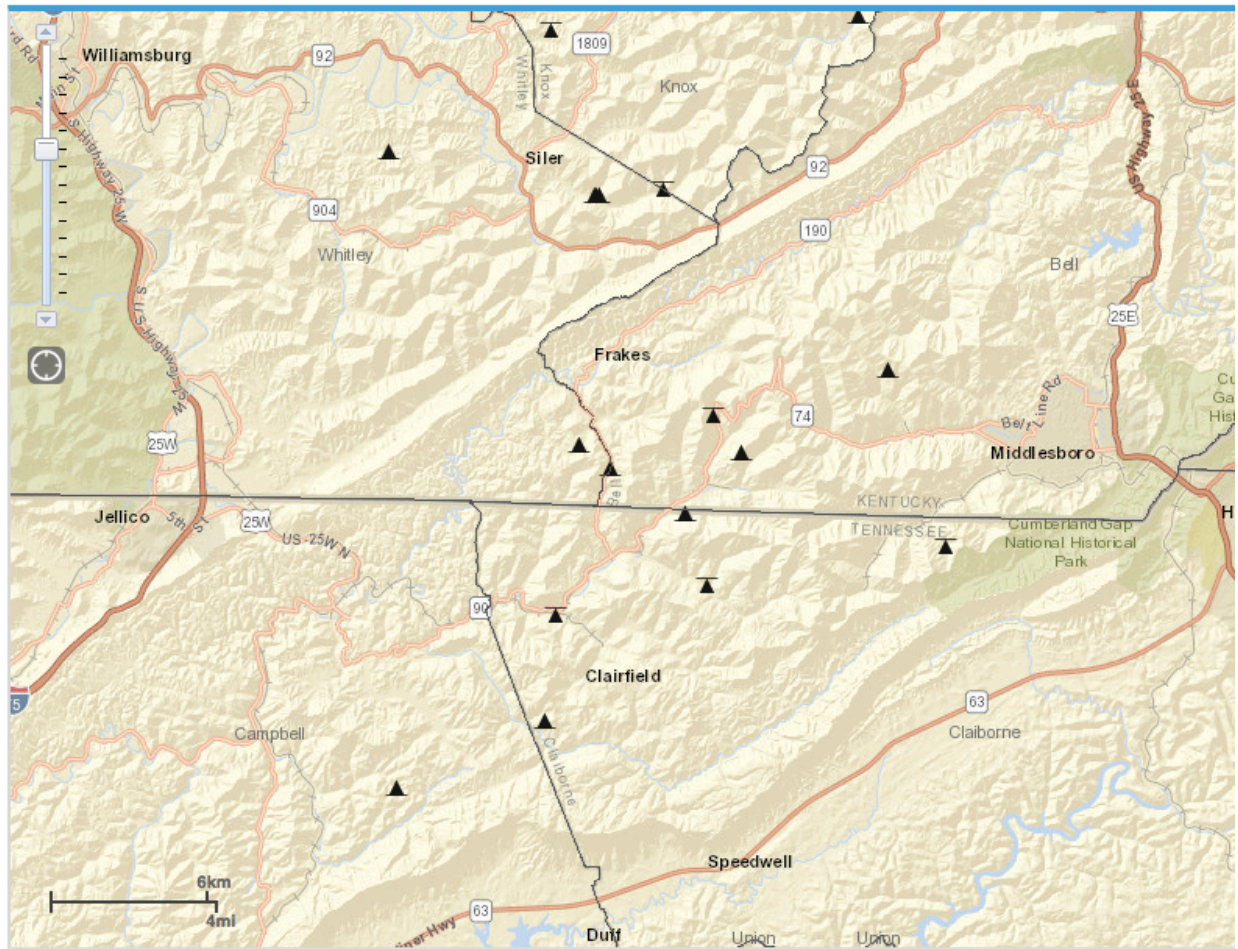


Figure 2.12- Clearfork Valley Coal Mines

(U.S. Energy Information Administration, 2017, March 27)

The Appalachian Regional Commission (ARC) categorizes counties based on economic status using unemployment rates, per capita market income and poverty rate. “Distressed” counties rank in the bottom 10 percent in the nation. “At-risk” are between 10-25 percent, “Transitional” ranks between the worst 25 percent and best 25 percent. “Competitive” and “Attainment” counties rank in the top 25 percent (Appalachian Regional Commission, FY 2007-FY 2016).

The Appalachian Regional Commission (n.d.c) states,

The Commission recognizes that some areas in non-distressed counties have substantially higher poverty or lower income levels than national averages and should be considered economically distressed. These areas should be an important focus of Commission assistance.

From 2002-2005, Claiborne County, TN was designated as “Transitional”, from 2006-2015 it was designated as “At-risk,” and from 2016-2017 is designated as “Distressed.” Campbell County, TN started as “Distressed” from 2002-2004, but then in 2005, it achieved “Transitional” status. From 2006-2011 Campbell County was “At-risk” and has been re-designated as “Distressed” since 2012. The Clearfork Valley area of Claiborne County was labeled as a “Distressed Areas” even when the county was classified in a higher level for all periods of data availability.

Table 2.1- ARC Economic Status - Claiborne and Campbell (2002-2017)

Fiscal Year	County	ARC Economic Designation
2002	Claiborne County	Transitional
	Campbell County	Distressed
2003	Claiborne County	Transitional
	Campbell County	Distressed
2004	Claiborne County	Transitional
	Campbell County	Distressed
2005	Claiborne County	Transitional
	Campbell County	Transitional
2006	Claiborne County	At-Risk
	Campbell County	At-Risk
2007	Claiborne County	At-Risk
	Campbell County	At-Risk
2008	Claiborne County	At-Risk
	Campbell County	At-Risk
2009	Claiborne County	At-Risk
	Campbell County	At-Risk
2010	Claiborne County	At-Risk
	Campbell County	At-Risk
2011	Claiborne County	At-Risk
	Campbell County	At-Risk
2012	Claiborne County	At-Risk (Census Tract 9704 Distressed)
	Campbell County	Distressed
2013	Claiborne County	At-Risk (Census Tract 9704 Distressed)
	Campbell County	Distressed
2014	Claiborne County	At-Risk (Census Tract 9704 Distressed)
	Campbell County	Distressed
2015	Claiborne County	At-Risk
	Campbell County	Distressed
2016	Claiborne County	Distressed

	Campbell County	Distressed
	Claiborne County	Distressed
2017	Campbell County	Distressed

(Table constructed using data from Appalachian Regional Commission, n.d.d, n.d.e)

History of Community Development in Clearfork Valley

In 1971, three Vanderbilt Student Health Coalition students one of which was John Gaventa completed the land and tax study for the five-county region of East Tennessee and found that 80 percent of the land was owned by one company and they were paying only 4 percent of the property taxes (Ferguson, 2015). Clearfork Valley residents joined with residents in the other counties to push the state to require fair market value on mineral rights and won a directive from the State Board of Equalization (Appalachian Land Ownership Taskforce, 1980). After this win, the members formalized the group as a new organization called Save Our Cumberland Mountains. Using this same study, they were able to work with legal assistance from universities to draft and push for legislation which became the first coal severance tax in the state (Ferguson, 2015; Statewide Organizing for Community eMpowerment, n.d.). The coal severance tax in Tennessee is currently one dollar a ton raised from 50 cents per ton incrementally since July, 2011 (T.C.A. § 67-7-104, 2016). The county retains almost 99 percent of the tax while half goes to education and the other half is used for highways or stream cleaning (T.C.A. § 67-7-110, 2016).

Lenzi (1990) studied 188 coal-producing counties in 15 states including Tennessee from 1970 to 1980 and found counties that received severance taxes showed increase in income 60 percent greater than counties that did not receive severance taxes, reduced poverty by 20 percent compared to nonseverance counties at just 4 percent and increased employment growth by 45 percent compared to nonseverance counties at 19 percent and bank deposits in severance counties grew at 55 percent while nonseverance counties grew at only 15 percent (p. 190).

Despite these tax victories which would promise to generate more revenue that could be used in the areas of the county impacted by coal-mining, the local political and governmental landscape had not changed. In a subsequent and expanded regional study with the continued involvement and coordination of John Gaventa, land ownership and taxing patterns were documented in 80 counties. Appalachian Land Ownership Taskforce (1980) states,

In Tennessee, a directive of the State Board of Equalization 9 years ago to apply a fair market value to mineral rights still has not been carried out... In general, taxes paid on

rural lands are also low when compared to their rising market value. Overall, the amount of taxes paid per acre of surface in the survey is only 90c. Almost a quarter of the owners in the study pay less than 25C per acre. In general, the large and the absentee owners tend to pay less per acre than the small, local owners pay. Part of the reason for this state of affairs, the study finds, is that the absentee owners are holding their property for its speculative value, or for the value of the minerals underneath, and do not make improvements which would increase the value of the land. On the other hand, the local owners tend to build upon their land, and to make more valuable improvements. In addition, in Tennessee, Kentucky and Alabama, vast tracts of land have received tax breaks designed for agricultural lands when, in fact, they are held for speculative purposes or mineral development, not for farming at all” (p. 28).

Community Leadership and Projects

A few community leaders were able to achieve a great deal in Clearfork Valley. They initially worked to create health clinics from War on Poverty funds and through work with the Vanderbilt Student Health Coalition (The Appalachian Student Health Coalition Archive Project, 2016). They formed two community development corporations Model Valley CDC and Woodland CDC as well as Woodland Community Land Trust. Through several loans from Equity Trust in forty years, Woodland Community Land Trust, Woodland CDC and Clearfork Community Institute have acquired 450 acres of land to promote shared space for permaculture and education (Equity Trust, n.d.). Much of this land had been mined and the community wanted to protect it from further damage.

They were able to get a public water system and created a community center from a consolidated school building that has offers classes and is a gathering spot for craft sales and educational workshops. They also publish a community newspaper. At one time, they also tried a new type of currency for community service hours that could be used for classes at the community center called Community Investment Certificates (CIC's) (Cirillo, 2000, April 7). The Clearfork Community Institute is a gathering spot for locals and a place where they can explore community development.

In assessing capital investment for positive change and the disinvestment that stifled efforts by the community, patterns emerge. Almost all of the accomplishments were catalyzed financial capital or by outsiders coming in to offer assistance or vertical social capital. This is demonstrated through the initial founding of the first health clinic Clear Fork Clinic with the War on Poverty funds. A local group initiated that first clinic by finding the space, an old schoolhouse, and they would use the \$7,500 for building materials and all the labor would be

volunteer. Marie Cirillo said this was already in motion before she came to the community, and she applied to be the coordinator. Another Glenmary sister was willing to move there. Someone from outside the community took the job, and Marie was able to work through a fund with the Catholic Church. The poverty program ended maybe 4 or 5 years after she came there. Marie Cirillo states, “One of the things that happened that none of us were smart enough to think about was that when that money left, the building went back to the company, and the company tore it down” (personal communication, September 20, 2016). When I asked her about how the community reacted to that, she said they were pretty devastated. It was just another reinforcement that the community was controlled to so many degrees by the coal company. During that same time period, however, the Commission on Religion in Appalachia had formed in Washington, D.C., and Marie was part of that organization. One of the professors at Vanderbilt was also part of the organization, and he contacted health professionals to help. This became the start of the Vanderbilt Student Health Coalition which held health fairs in many of the unincorporated communities and eventually with local help created health clinics across the valley (The Appalachian Student, 2016, July 15; M. Cirillo, personal communication, September 20, 2016).

Chapter 3 - Theories

As early as Appalachia became an identified region in the United States and examined as a geographically defined sub-culture, it has been classified as lagging behind the rest of the nation in terms of progress as far as capitalist economic development defines it. Appalachian studies scholars have wrestled with competing theories of Appalachian exceptionalism for decades to answer the question about why the region has been in a state persistent poverty. There is discussion about how Appalachia has often been incorrectly classified as a homogenous coal mining region. Also, scholars point to the past agrarian and often overlooked subsequent industrial agriculture which became the entry into the world market system (Dunway, 1996; Marley, 2016; Billings & Beal, 2000). Two main theories that present-day scholars now reject are worth noting because they are prevailing archetypes of Appalachia in mainstream thought. The Culture of Poverty model suggests that many attempts have been made to develop Appalachia and have failed because the people (and culture) is not embracing them. Appalachian scholar, Helen Lewis (1978) states,

The Culture of Poverty Model attributes regional problems to the deficiencies of the people and their culture...The planners, economic developers, and government administrators more frequently explain the problems of the area as being due to underdevelopment ... Appalachia is a good example of colonial domination by outside interests. Its history also demonstrates the concerted efforts of the exploiters to label their work 'progress' and to blame any of the obvious problems it causes on the ignorance of deficiencies of the Appalachian people (p. 1-2).

Lewis (1978) also raises the Internal Colonization model that captured much of Appalachian studies for decades. This model positions Appalachia as a colony of the northern industrial progress and its insatiable need for coal for steel production. This model has been rejected by most scholars because it does not fulfill the traditional roles of a colony in a legal or ethnic sense and does not adhere to dual social structure which is more defined by class in America than geography. However, when studying the region and extraction of capital for financial gains elsewhere, this model at least points to some defining factors of Appalachian exceptionalism. These theories are relevant today because they both demonstrate a region's attempt to understand its inequitable development compared to the nation as a whole. Historians and scholars have also examined the attempts to develop Appalachia and the growth center strategy that has been employed.

Walls (1976) states,

The regional development model, epitomized by the programs of the Appalachian Regional Commission, is concerned with providing economic and social overhead capital, training people in skills for new industrial and service jobs, facilitating migration, and promoting the establishment or relocation of privately-owned industries through a growth center strategy. A modernizing elite is seen as the agent of the developmental process. This model provides needed resources to the region, but, in the absence of a critique of domination and redistribution of power and wealth, also serves as a rationalization of existing structures of privilege (p.iii).

By examining the shortcomings of Culture of Poverty, Internal Colonization and Regional Development models, Walls (1978) concludes, “Central Appalachia is best characterized as a peripheral region within an advanced capitalist society” (p. 318). Marley (2016) classifies Appalachia further as a commodity frontier within the world systems framework explaining how regions such as Appalachia become underdeveloped. Marley (2016) states,

Commodity frontiers are regions where minimal capital investment can consolidate and accumulate great quantities of land, labour and resources. They are formed as a way of mass-producing one commodity in order to supply cheap inputs for capital...The exhaustion and succession of commodity frontiers are formed in regions with low capitalization that are rich with strategic resources. Appalachia is a case in point. Commodity frontiers, then, are the geographical expressions and fixes of capital’s need for cheap commodities – an environment making process in which capital flows in and out of regions, weaving together rising and falling frontiers (p. 228).

Couto (1999) states,

The changes in Appalachia suggest the manner in which American forms of social capital vary with the market’s needs for workers. Our social capital invests public goods and moral resources primarily to produce and sustain people as laborers; it limits the community that it produces to the labor force (p. 24).

It is helpful to use Olin Wright’s (2010) description of three domains of social interaction and power, economic, state and social to understand how the balance has by design favored capital over human rights in Appalachia. Wright (2010) states, “In actual capitalist societies, much economic regulation is in fact more responsive to the needs and power of capital than to the needs and power generated within civil society” (p.87) wherein “state power regulates capital but in ways that are systemically responsive to the power of capital itself” (p.88) (See Figure 3.1).

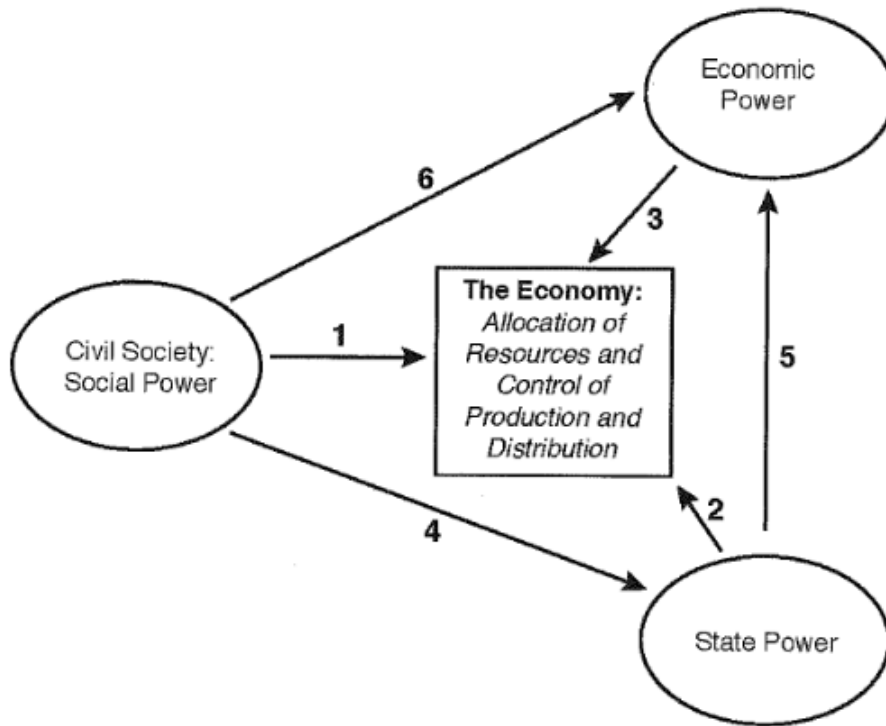


FIGURE OF THE INDIVIDUAL LINKAGES

1. Social economy: social provision of needs
2. State economy: state produced goods and services
3. Capitalist market economy
4. Democratic control over state power
5. State regulation of capitalist firms
6. Social participation in controlling economic power

Figure 3.1- Linkings in the Pathway to Social Empowerment

(Wright, 2010, p.130)

In Appalachia, enhancing the social domain which has been unbalanced in respect to state and economic power, is important. Eller (2008) claims, Appalachia is a bellwether for the nation and “has much to contribute to this growing global conversation about a new economy and a new social consciousness” (p.265). Eller (2008) emphasizes,

Re-empowering Appalachia will require a fundamental change in our deepest assumptions. One of the central themes that emerges from our history, for example, is the fallacy of the prevailing assumption that economic growth equals progress. No economic value is more pervasive in our culture today, but at least since the late nineteenth century it has been an illusion in the mountains that simply expanding markets, building infrastructure, and extracting natural resources produces development (p. 264).

For example, almost every study about Appalachian development acknowledges the problem of absentee landownership. Not since the citizen-academic partnered Appalachian Land Study released in 1981 has the Appalachian Regional Commission or any development district charged with public support of development in the region assessed absentee ownership in Appalachia. They also have rarely explored public ownership of land and never explored community-owned industry.

While there was a physical shift in Appalachia with change in land rights, a cultural shift left the region in a cycle of dependence on external sources of economic stimulus. It is important to realize this shift in the coalfields of Southern Appalachia in order to proceed with a successful model of intervention. James Jones, Jr. of the Tennessee Historical Commission (2008) states,

Before industrialization, mountaineers made a living on small mountain farms and organized their lives around family life, work, hunting, and the change of the seasons. The independent yeoman farmer would be transformed into an incidental industrial worker in just fifty short years. After the coming of coal mining and modernization, the mountaineers were landless and their families lived in company towns with a blend of ethnic and racial groups (para. 31)...

Jesse C. Mills, the late director of the TVA Technical Library, explained the significance of coal mining to the population of the mountains this way: The mining and removal of coal became the one purpose to which all others were subordinated. The consequence of such one-purpose control was the loss by these mining communities of the mastery of their own destinies, the absence of development of any normal mechanism for self-control, and the forced exclusion of such mining communities from the mainstream of American democratic, social, civic, and economic development (para. 49).

So, what is needed at this time as national attention is once again focused on Appalachia is a model of community development that is different and that empowers residents and restores the balance of social power. Many attempts have been made to “save” Appalachia from the pattern of poverty by outside developers; yet, these models have all but failed because they have not involved the residents whose families have existed here for generations. Outsiders attempting to intervene are viewed by those families as yet another effort to subjugate them to a form of development outside of their control without regard to their values. Because the people in Appalachia are those that have maintained familial roots in the area for generations, they have a keen sense of community and kinship. Christenson (1989) attests,

The role of the technical expert or the planner is to assess the situation in a locality, and, based on the best technical information, to suggest the most economically feasible and socially responsible approaches for improving the situation... [They] are technicians with specialized professional skills for designing and developing projects (p.35).

In the field of community development, the self-help approach is another way for communities to create plans with limited intervention by technical experts who are often not from the community. Christenson (1989) states, “The advantage of using the self-help approach is that the people themselves determine what is to be done; in the process they learn both how to achieve a specific task and how to accomplish future goals” (p.34). This is particularly important in Appalachia. Nestled in the self-help approach, Appreciative Inquiry involves personal contact with many individuals to hear their stories and from their stories derive themes, priorities, and ideas that will drive the design of community development (Cooperrider, Whitney & Stavros, 2008).

How can the investment in capital assets in Appalachia offer a different approach to community well-being?

By identifying existing assets instead of focusing on deficits, people can reclaim their sense of power and imagination of what could be in their community. Asset-based approaches are becoming more common than traditional needs-based approach in community development. Communities can focus on what they have the power to affect and immediately begin to invest rather than waiting on built or financial capital that may take a long time to materialize, not come at all, or be used in a way that does not have the maximum impact for the community. The Community Capitals Framework is a system analysis theory used to evaluate a community’s well-being and capacity for development based on seven types of capital (natural, built, financial, human, social, political, and cultural). The Community Capitals Framework provides a unique method to explore “the interaction among the capitals, and the resulting impacts across capitals” (Emery & Flora, 2006, p.20). Many researchers have explored the purpose of community development. Green and Haines (2008) define community development as a “planned effort to build assets that increase the capacity of residents to improve their quality of life” (p.7). Flora & Flora (2008) embody self-help community development by providing categories that residents can use to classify assets themselves and determine how they can be used to enhance one another.

Flora & Arnold (2012) state, “Community development is different from economic development or economic growth, which focuses only on financial and built capital often to the detriment of the other community capitals” (p.2). The Community Capitals Framework focuses on social capital as the building block to a community’s success and sustainability of continued investment and increases in all capital assets (Emery& Flora, 2006). By evaluating a period of

transformation in community development when a community was spiraling downward and reversed the trend, Emery & Flora (2006) found by studying this spiraling up period that investment in one capital contributes to the increase in other capitals (Emery & Flora, 2006). Community Capitals Framework underscores all capital investment equally with special attention to ensuring social and cultural capital are enriched.

Researchers are beginning to apply community capitals to rural economic development investment and have found them to be significant indicators for success. Zekeri (2013) looked at social, cultural, built, and natural—four of the seven capitals in CCF—and concluded, “Communities that are most successful at economic development efforts, in fact, do need community capitals” (p.8). Crowe (2008) used some of the community capitals (natural, built, social, and human) in a review of seven rural communities in the western United States and determined that natural, social and built can be impactful to economic development and found human capital to have no effect. This study, admittedly, does not account for community impacts of these capital investments and does not document the flow of one capital to another; rather it only uses the recruitment of industry and self-development or business created locally (Crowe, 2008). This research proposal will carry this conversation forward by assessing the current stocks and flows of the capitals in Clearfork Valley.

Some research currently designates social capital specifically as an indicator for economic success as it relates to natural resources in rural communities. Chang, Allen, Dawson, & Madsen (2012) intricately discuss how to measure social ties related to natural resources through a network analysis and numeric coding system, which is then used to create a social network matrix related to the natural resource. They suggest this data can help to ensure those with various views are represented in developing plans for natural resource management, aligning with the community-centered approach of Community Capitals Framework. Gutierrez-Montes, Siles, Imbach & Imbach (2009) apply all capitals to a Managed Landscape Approach using a Participatory Action Research model and demonstrate its effectiveness for community access to planning efforts. This study is not involved with a natural resource dependent community and does not share the unique history of oppression of Appalachia.

Participatory action research (PAR) is emergent qualitative research whereby research subjects become collaborative partners in each phase of the research process (Baum, MacDougall, & Smith, 2006). PAR can allow residents to explore their community and act to

change it in a way that is grounded in researched theory (Kemmis & McTaggart, 2005). PAR can be viewed as a self-help approach to community development research and planning.

By addressing several of the community capitals in their analysis of Appalachia, Glasmeier & Farrigan (2003) call for a holistic people-centered, asset-based approach that allows for investment in consideration of the historical context of intervention programs that have returned little by way of change. The renowned Appalachian scholar, Helen Lewis (1978) suggests, “We need a model which explains and examines the relation between economic power, political power, and cultural systems, how they change and how people’s perceptions of their situation are formed and changed” (p. 5). This research effort responds to their call.

Chapter 4 - Methods

As grounded theory research, this study is comprised of reviewing existing literature on the economic diversification in an Appalachian Valley, evaluating capitals identified by the community and examining the historic and current role of community developers in Appalachia.

Community developers enter a community with the desire to expand the options a community has and to implement a plan that will hopefully lead to a better quality of life for those living in it. Community development does not have one agreed upon definition, but the Community Development Society recently adopted a definition at its 2016 international conference stating,

Community development is a practice-based profession and an academic discipline that promotes participative democracy, sustainable development, rights, equality, economic opportunity and social justice, through the organization, education and empowerment of people within their communities, whether these be of locality, identity or interest, in urban and rural settings (Marko, 2016).

My intention in discovering how Community Capitals Framework applied to community development in Appalachia in coal-dependent economies and develop insight for a new way forward for community engagement in the region. While economic and community development is a long process and one that naturally could not be completely surmised in the study period granted to me, I made a commitment. I would conduct this study as participatory action research to allow equal input from community members on the path forward and what they would best like to use the research for. Because it was set up as emergent research, it evolved to become a reflective examination not only of the Community Capitals Framework but about how community developers work with communities. The intent always focused on what I could produce that would both add to the field of community development and to the future planning efforts of the community.

I eventually deviated from my plan to do a workshop series with the goal developing a plan of action with the community for several reasons. I found the community members and leaders were under enormous pressure from existing commitments that perhaps they did not even acknowledge. I came to understand this as dates for workshops were postponed or never set because of competing events or crises in the community. The group was also very well versed in multiple methods of group engagement and meeting processes and almost overlooked themselves with all of these separate events with a reluctance of combining them even though most of the time the same people attended. I felt it was more important to observe their current

work to understand how Community Capitals Framework and Appreciative Inquiry might enhance it. I also made this adjustment because I was not as limited by needing a defined product at the end as many paid community development professionals are. Over the course of the study period, I visited the community on multiple occasions throughout the year and attended their events. I did offer assistance when needed including driving people to two conferences and loaning items or research assistance for projects. I realize that this blurs the line between researcher and participant, but this was in a way the intention. Because I was also working full-time, and getting to the community included a three-hours round-trip commute, I was limited in the amount of time I could interact. If I had more time, I believe I would have been able to further work with the community to combine some of their many projects, recruit more community members and complete a planning process with an action plan.

To collect data, with permission, I recorded meetings, took notes and triangulated accounts of life and struggle as much as possible when data was available. Several issues compromised the value of the data. Many times information was not available. For example, the community leveraged financial resources from the War on Poverty program. This information, though archived, did not itemize funding clearly for each county. Also, communities of place oftentimes do not align with government boundaries. This is what I found for Clearfork Valley. The people here share a unique culture, remoteness, and history with extraction that separates them from the counties they belong to. Because of this, county data does not accurately portray their living conditions. Census tracts were more valid, but this data point is not utilized often for separating data (See Appendices E &F).

There was also a long history of organizing and collective group effort to the point that I was entering a process that had started decades ago with many of the same players. I realized there was an extended effort from many organizations to involve community members from this community. The Sierra Club organizer was a resource and a gatekeeper connecting community members to larger movements. Because the work of the organizer was already seen as a way to organize the community, the asset-mapping became another project rather than a way to organize multiple projects. I perceived that this became overwhelming at this specific time in the community's history and adapted my purpose accordingly.

Community Engagement Asset Mapping Case Study in Clearfork Valley

I came to the community with a basic idea of how we could proceed. I wanted to first engage them as a group about a vision they had for the community using the Appreciative Inquiry method (Cooperrider, Whitney & Stavros, 2008) and identify assets with the Community Capitals Framework adapting the process outlined in (Emery, Fey & Flora, 2006). I learned community members that would likely be interested in helping to convene a group. I found that Woodland Community Land Trust had an Office of Surface Mining and Reclamation (OSMRE) VISTA with a project focused on asset-mapping. I discussed the possibility of doing a project with her and her supervisor and learned they had not yet identified a way to proceed with the asset-mapping project and welcomed assistance with it. I sent them the latest edition of the *Rural Communities: Legacy and Change*.

We decided to plan a day for a training on asset-mapping, and worked with the VISTA to design the workshop. The workshop would be modeled after Appreciative Inquiry and focus on story-telling and visioning. It was placed inside the agenda of another group they were part of called Tennessee Appalachian Community Economics (TNACE). This group was working together on projects for job development in Clearfork Valley where they lived. The organizer for the group had been working with them for over 10 years on various projects and was currently contracted with the Sierra Club, an environmental organization that had devoted a portion of funding for environmental justice for coal-impacted residents.

In planning for this first exercise, the organizer with Sierra Club, informed me that they had already conducted a visioning exercise before and sent me the notes from one of their first meetings held in 2013. What was before me was some visioning and the group's skill assessment. I was puzzled that those helping to plan this meeting had been involved with the visioning process years ago but did not seem to have any institutional memory of it. Rather it was held through notes from an organizer that had been working with the community. This was interesting as it identified a loss of historical knowledge shared by community members or group efficacy. Another possibility was that they looked at each workshop or project as separate from one another rather than a continuous thread of evolution or creating what they envisioned. Or perhaps, they had not re-visited the vision enough to hold it in group consciousness.

We adjusted the workshop so that we would do an overview of the community capitals and the first portion of the Appreciative Inquiry process, which includes the Dream phase (see Appendix A). I opened with a map of Clearfork Valley and asked what community meant to

each of them and we did a go-around.

Part of what we wanted to do at the workshop was define where community was for different people. Did they define it as John Gaventa did in *Power and Powerlessness* which includes four counties across two states and call it the Clearfork Valley? Or did they identify with the coal camps that once existed and are now functioning as unincorporated communities? In one-on-one discussions with some of the participants in weeks before the meeting, they heavily identified with the unincorporated communities. This would be illustrated by statements such as, “Oh, that’s all the way down the mountain in Duff.” In driving distance Duff is about 30 minutes from Eagan and Clairfield. Or, “That’s over in White Oak,” which would be a driving distance of 10 minutes from Eagan and Clairfield. Roses Creek Road or “Roses Creek” is another seemingly separate community that is 10 minutes away from Eagan and Clairfield. Yet, in coming together, they identified Clearfork Valley as the home they all shared. In 2000, *What on Earth is Happening in Clearfork Valley?* was started as a community newspaper released in print through local institutions and available online for certain periods. The editor was a nun who was part of a breakaway movement of the Catholic Church in the sixties called Federation of Communities in Service (FOCIS) and had located to the area to do community development (Vines, 2010). In the newspaper, Cirillo (2000, March 6) defines Clearfork Valley for the community:

The name Clearfork Valley suggests the connection between Fonde, Pruden, and west to Morely, south toward White Oak, Duff, Rock Creek and Black Diamond, and north in the direction of Frakes. Here’s why:

In the ‘60’s when a handful of local people in Clairfield... organized into a non-profit called the Clearfork Clinic. Later other clinics were started in White Oak, Stinking Creek and Frakes...

White Oak had lost much of its water from deep mining. These people worked tirelessly but to no avail to get a water system. But years later there emerged the Clearfork Water Utility thanks to the joint efforts of people in Clairfield and White Oak. The utility now serves White Oak, Clairfield and much more. The J.M. Huber Corporation put up matching funds for an Appalachian Regional Commission grant to get water in the Kentucky end of the Valley.

Hence the name Clearfork has been claimed to represent citizens who take their citizenship seriously” (p.1).

Many including Cirillo herself have identified that a lot of the local people viewed her as an outsider (Cirillo, September 15, 2016). This community newspaper article can be thought of

as a bonding and bridging exercise in social capital and perhaps also as a delineating one. The effort of defining the former coal camps as a unified entity could give rise to the ability to bridge capital. Yet, coming from one viewed as an outsider, it could also be seen as an exercise to define the place creating a sense of false bridging. By doing so, those who associate as Clearfork Valley might be seen as those endeavoring to participate in projects where one group is involved and those choosing not to participate may be holding on to their own independence and ability to define where they live for themselves. A newspaper article hangs on the wall of Clearfork declaring her a communist. Thinking back to the 1930's with the divisive communications in support of industry and the language used to describe the union organizers from New York as communists, one could conceive that this line of thinking remained and could have stifled many of the cooperative efforts of local people to join in the vision for a diversified and sustainable Clearfork Valley.

Everyone participated in the workshop, and we identified assets based on stories they shared in response to three questions:

1. Tell me about a time you felt really good about being part of this community?
2. What was it about the situation that made it work so well for you?
3. What is it that you value most about this community?

The themes that emerged were then grouped by capital (Appendix B). Many parts of their stories fell into social, cultural, and natural capital categories. The built capital were all results of community initiatives and can be viewed as a direct result of investing in social, cultural and human capital both internally and externally. Political and financial assets were not mentioned in their stories though they were needed to secure the built capital—all of which were funded by grants or government funds.

The next steps the group identified were to take the workshop to the Duff Road group and to the Model Valley CDC to get feedback from the wider community. The Model Valley CDC also operated from the water department building. The VISTA and I used the same questions and a skill's inventory and set up a table at the water department. It was not busy while we were there with only three people coming through. A thrift store was also part of the building but did not generate more traffic. People identified similar assets as the group and some took the surveys home. A younger adult did a skills inventory interview where she identified her ability to build computers. One of the elders that attended the Community Capitals Framework workshop at Clearfork Community Institute came by and interrupted the interview suggesting that the lady

was really good with children and crafts and this was instead what she should focus on. She was a known naturalist and was representing her values to the young adult. After this encounter, the supervisor of Woodland Land Trust commented on the interaction and was dismayed that this pattern of telling people what they should do rather than listening interfered with community building.

After working with the VISTA, she was going to do further surveys and help set up the Duff Road group meeting. She wanted to do the surveys but did not want to conduct them at the many other activities she was planning. I realized that she did not have the capacity to carry this forward on her own and suggested perhaps there were some volunteers that could help. This is when the research shifted gears to more understand what the community was facing as a roadblock to prioritizing their own vision and actions needed to achieve it. I attended more TNACE meetings that lasted between two to four hours. This was a time for social gathering where people would share lunch and pleasantries as well. During the year I spent with the community, the number of people involved did not expand beyond the eight core members that attended meetings. Meeting notes from before included others that did not attend any longer. The number of things they were involved in is actually astonishing for a group this size.

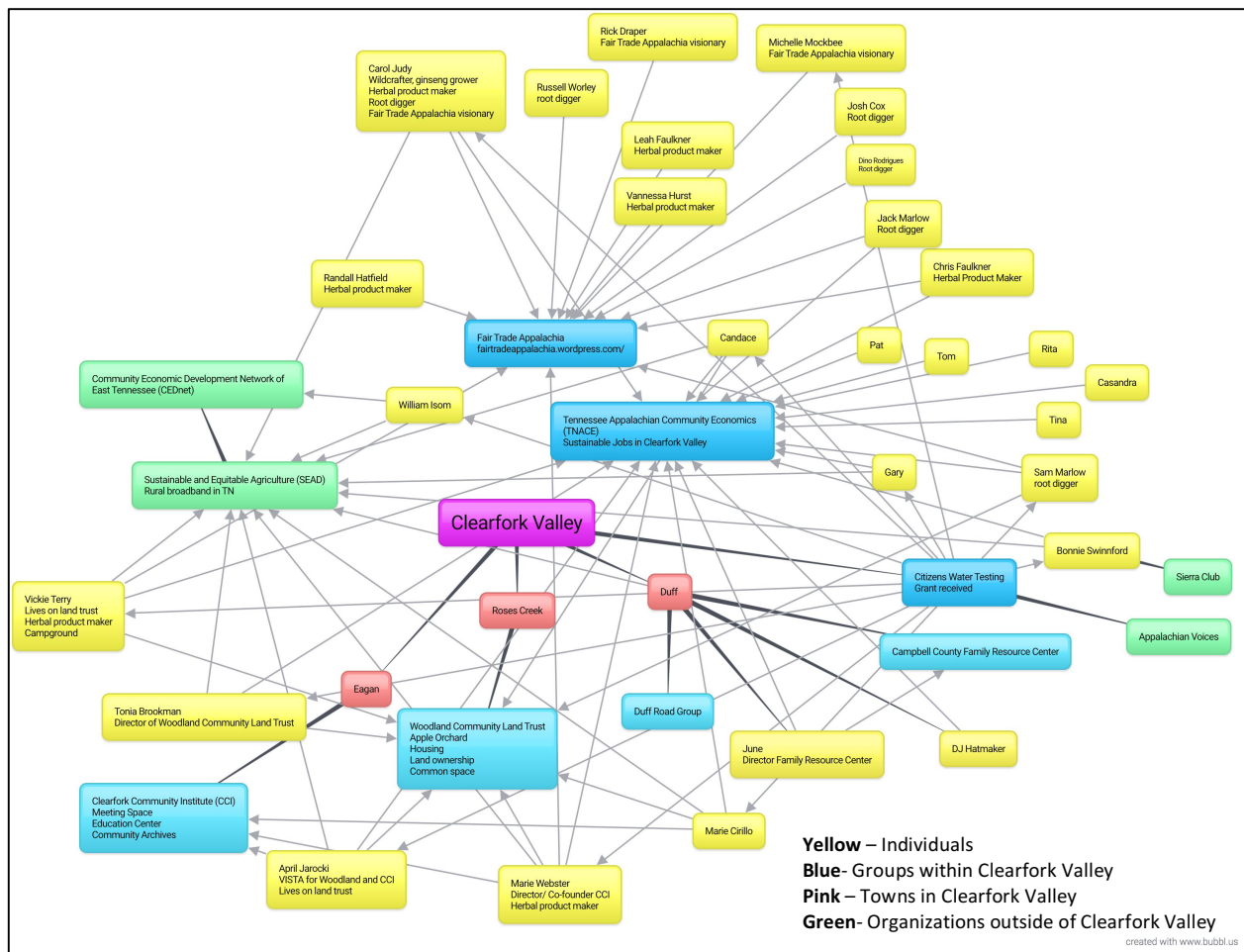


Figure 4.1- Clearfork Valley Network Analysis

(Author generated network analysis)

They also were part of a water quality testing group, the Duff road group, Community Economic Development Network of East Tennessee (CEDnet), Sustainable and Equitable Agricultural Development (S.E.A.D.), attended multiple public hearings, County Commission meetings, Governor’s Rural Taskforce meetings, AML workshop, TVA board meeting, and hosted multiple classes and events each month including USDA canning and nutritional classes, Earth Day, craft fairs, a Lands Unsuitable for Mining hearing, supported Campbell County Family Resource programs like backpacks with food for kids, and managed multiple crises like transportation help when roads were too bad for buses. They not only participated in these events but were leaders at them. While this was using their social capital, it involved mostly bonding between groups they were already associated with inside and outside of the community. These activities are classified in the following ways:

- Reacting to threats

- Building access for the future
- Being an advocacy voice as directly impacted citizens of a coal community
- Building skills
- Direct service

The rapport and transfer of all this social capital with those in their own community was tenuous. While perhaps the community members didn't share some of the same beliefs about what constituted threats, they did share many of the same desires and concerns. There was an analysis gap that had likely started decades ago which prevented people from becoming involved in their projects.

Reflection on community

While this community may be unique with the plethora of ideas they have for long-term sustainability and self-sustenance, extending these projects into the future demands a lot of planning with very little resources. The Woodland Community Land Trust was envisioned as a way for people to own homes and have access to their own land for gardening and a communal space for sustainable timber products. The changing environment since the land trust was founded decades ago has led to a change in the structure. Many of the residents now rent properties on a short-term basis and are more transient (Marie Cirillo interview April 29, 2016; Tonia Brookman interview September 29, 2016). This shift occurred as an outside funding source managed the better-established mortgages and left the remaining troubled mortgages to be managed by the land trust. To the current manager's dismay, houses burned either by accident or by design and owners collected insurance with no safeguards for the land trust (Tonia Brookman interview, April 29, 2016). This is attributed to the increased economic hardship families face.

Many residents are limited in their capacity for employment and a considerable portion receive disability. The Clearfork Valley region in Claiborne County has 51.1% of the population receiving disability and a 37.1% poverty level (U.S. Census Bureau, 2010-2014b, Census Tract 9704). The Campbell County side has 40 percent of the population receiving disability with a 27.4% poverty level (U.S. Census Bureau, 2010-2014a, Census Tract 9501). While these individuals have skills that could garner more income, the fear of losing a stable income stream in the face of health issues prevents them from pursuing income from quilting, furniture making, and other honed skills prevalent in the Appalachian region. Human capital is compromised.

Larger goals for the valley include marketing value-added products from local vegetables and fruits and using non-timber forest products to produce tinctures, lotions, salves and body

products. Residents have not yet established a consistent monetary value to place on these goods or a marketing strategy. Entrepreneurism is a new concept in the way it can produce monetary gain. For many who produce these goods, they are given freely or traded for services or other goods. For a community developer from the outside, it appears that the value placed on these items is not monetary and transitioning to this type of system may be perceived or could actually decrease cultural and social capital rather than increasing it. Another possibility is the common perception that folks here are undervalued in the larger political system in which they exist. Many feel disenfranchised in the broader context of development in the area. This includes lack of built capital investment and human capital investment in the valley. They are perhaps devaluing their skills relative to the larger context of the pattern of development in the region. Power brokers for the counties in which they live value manufacturing, corporate retail and large-scale extraction industries such as coal and timber as job producers, progress, and tax revenue.

Tourism ED Excluding Clearfork Valley

Though tourism is gaining ground in the larger area and now comprises a larger share of the economy, the valley has not been promoted in the mix of tourism assets of these counties. Many factors contribute to this. The communities situated in the Clearfork Valley were all once coal camps. This area has been valued almost solely for extractive purposes. Since the mechanization of the mining industry reduced the amount of jobs available, many of the residents moved north to seek employment and the valley was not re-populated. Since the boom of mining, most of the land is owned by absentee landowners—land-management companies seeking only to profit through the sale of timber and leasing of mineral rights for coal extraction. While this provided jobs for some who remained, the lack of landownership made this a political sacrifice zone for any other type of development. Secondly, the area is not readily accessible due to the mountainous terrain and winding roads in poor condition. The feasibility of any development that is highly valued in the current political structure such as manufacturing or commercial retail centers is not feasible. Thirdly, due to the extraction, much of the natural capital that attracts tourists has been compromised. Large gaping swaths of land that have been clear-cut for timber extraction impact the views that attract tourists to much of the Appalachian region. These clear-cut areas also compromise the bio-diversity. If they are re-seeded, it is with mono-species for continued timber extraction as regulations and incentives do not require diverse reforestation. Lastly, the people have suffered from disinvestment in their education systems and

are disconnected from the major population centers and resources in a way that isolates them from central places where investment decisions are made. While there is national attention on helping coal-dependent communities, this is often not translated into local development efforts that have long operated on the central growth strategies promoted by regional development offices like ARC, one of their largest funding sources.

AML and RECLAIM

The community leadership in Clearfork Valley is diverse in age. Another unincorporated community, Duff, is developing leadership and group unity through a road that they demanded be repaved. The county agreed to repave the road after threatening to increase taxes to pay for it resulting in a public outcry. More residents of Duff are attending community meetings in Clairfield to focus on abandoned mine land (AML) reclamation opportunities with hopes that an influx of capital via legislation known as the RECLAIM Act which would be directly aimed in the areas of the county with little other investment from traditional local sources. More people who had not previously been engaged with the core group at Clearfork Community Institute who don't necessarily consider themselves environmentalists attended a workshop in April 2016 to learn about abandoned mine land that still exist in their community and the economic development opportunities possible if RECLAIM becomes a law. Under this proposal, Tennessee would see almost \$12 million released from existing AML funds. Clearfork Valley has a large portion of the AML sites in Tennessee. The exact number is being calculated as new AML sites were recently discovered through technical analysis conducted by the Office of Surface Mining Reclamation and Extraction (OSMRE). At the workshop in Clearfork Valley the list of AML sites provided through OSMRE's official registry did not match a recent map OSMRE provided the community upon request. The map depicted many more sites than were on the registry. With help from a state-wide organization that some of the community leaders helped found, they are requesting a meeting with OSMRE and Tennessee Department of Environment and Conservation (TDEC) to gain clarity on the discrepancies. This is yet another way that local communities provide insight and oversight of state and federal agencies working on their behalf. While this is an opportunity for communities to be involved in data and further their own knowledge of how governmental systems work, it requires a considerable amount of their already limited capacity.

Substance Abuse

While I was aware of the methamphetamine epidemic in East Tennessee in the last decade from news events and personal stories, I wasn't aware of the rising prescription opioid epidemic in rural Appalachia. The Appreciative Inquiry process allowed the strong group of people to focus on the positive. From personal interviews before that meeting, I felt there was a feeling of hopelessness. This was often conveyed in conversation by statements such as, "Yeah we could do that if anyone would do anything around here" or, "So many young people are getting hooked on drugs" (T. Brookman and A. Jarocki, personal communication, December 29, 2015). This caught me off-guard as I had heard many things about all the initiatives coming from this small community. At first, those I met put on a good face and maintained their professional capacity. They discussed the asset mapping project and other dreams of local food production.

As I became more involved in the community efforts, I got to know the people who live or work there better. That is when some of their sadness and fears about the tumultuous past rose up vocally. One day I came to visit, and the land trust had just learned about a fire on their 450-acre property. I was there when they received the phone call from a neighbor informing them the property had burned the night before. They had just purchased this home as an addition to the trust. They did not react in the way one would think with urgency, distress or disbelief. The reaction was nestled more in a quiet reluctance to face another loss balanced with the annoyance of one more thing to take care of on a long list. In fact, they had planned to take me on a tour of the land trust. The burnt remnants of the newly acquired plot just became a stop along the way (Appendix D). They had stories of police and fire departments' lack of response to incidents in the community and many fires. They showed me all the houses some of which were difficult to see beyond the trees and unnatural edges shaped by a century of mining before the land trust had acquired the land to restore it. I wondered if this tradition of arson was carried over from the early land corporation acquisition measures. The coal camps often had their own police units and because of remoteness, the police departments that later formed through the county may have just neglected to include the area in their jurisdiction. The departments are likely lacking resources and capacities to respond to events such as these. The fire department is volunteer and because of the response time and subsequent rating, many aren't able to get insurance. The likelihood of increased population then is compromised. In 2016, the Tennessee Bureau of Investigation was looking into misuse of funds from the White Oak Fire Department and the Campbell County commission voted to withhold funds (Wilder, 2016, March 23).

They took me to the Woodland cemetery where a teenager who had grown up there and overdosed on opioids was freshly buried just months before. Family dynamics have changed as well as grandparents raise their grandchildren. Kinship networks remain tight though drug addiction renders some generations unable to function in a positive way.

I learned that the drug epidemic impacted the small group of leaders that comprised TNACE in very personal ways with some members struggling themselves and by having family members in the community that were affected. I learned that the past mentoring program with youth in the community was compromised by drug use with visiting college students.

The Volunteers-in-Partnership (VIP) program is a job-training and skill-developing program where local inter-generational volunteers collaborate with college students and groups for community outreach and education during their spring and fall breaks. VIPs also have the opportunity to learn from one another the differences between and misconceptions of rural and urban communities. We want our local youth to develop job experience, hands-on training, leadership skills. Volunteers at CCI have access to opportunities our networks provide both near and far. We want them to learn the importance of community engagement and to use these skills to make changes in the community and to feel pride in knowing that their actions made a difference. At CCI we are always expanding our volunteer base to make valued impact on our local youth and future generations (Clearfork Community Institute, n.d.).

This resulted in a form of linking social capital that had a negative outcome for the community. Eller (2008) states,

By the 1990s the illegal use of prescription narcotics such as Oxy-Contin and Vicodin had become an epidemic. Marketed by national drug companies as less addictive and less subject to abuse than other drugs and almost casually prescribed by scores of mountain doctors, these narcotics rapidly became the drugs of choice among illegal drug traffickers and users in Appalachia... The rise of the prescription drug culture in rural Appalachia was a tragic symbol of the arrival of modern America in the mountains.

Claiborne and Campbell Counties in Tennessee fall within the High Intensity Drug Trafficking Area in Appalachia (Appalachia High Intensity Drug Trafficking Area, 2016). It includes all of Clearfork Valley (See Figure 4.2).

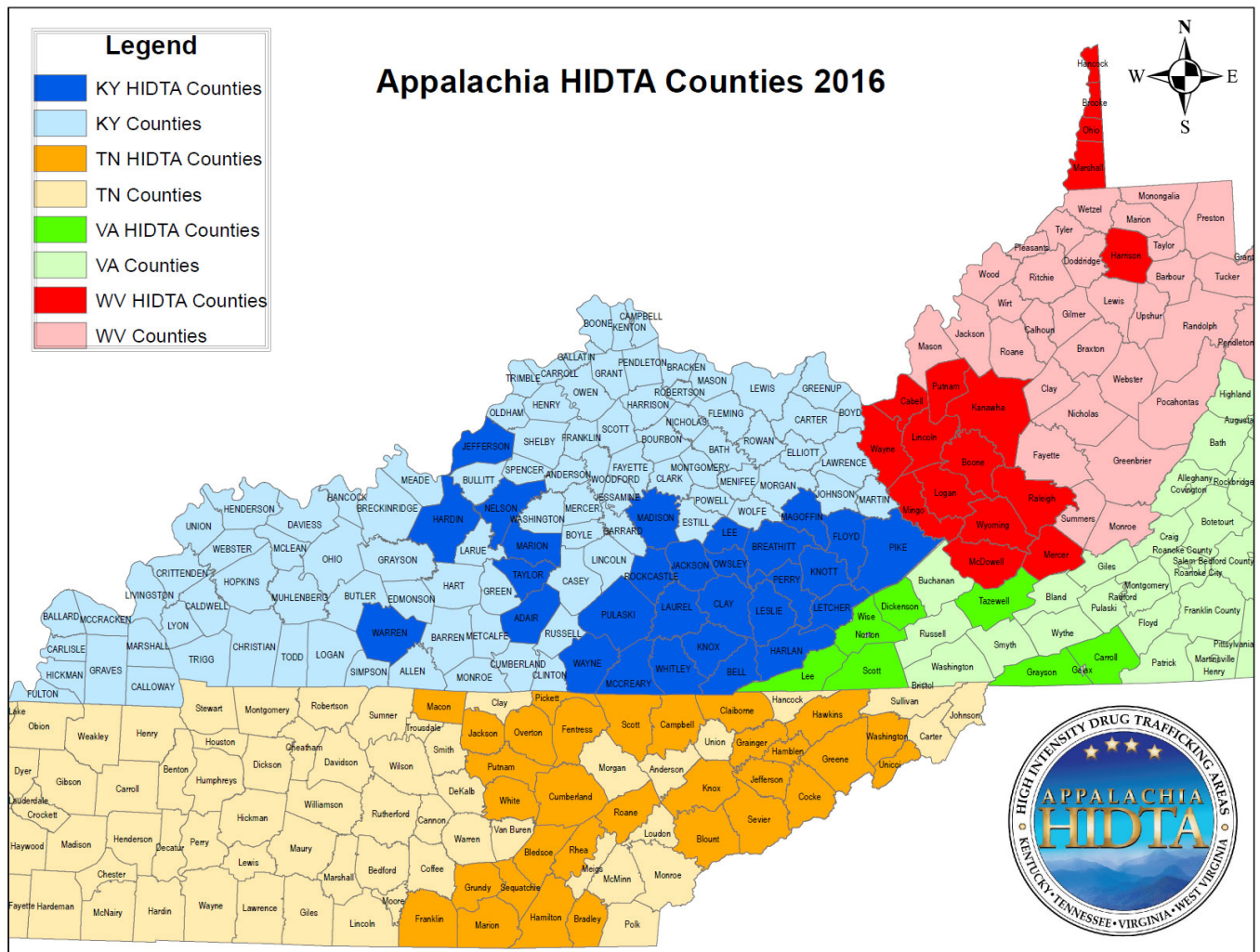


Figure 4.2 - Appalachia High Intensity Drug Trafficking Area Map
(Appalachia High Intensity Drug Trafficking Area, 2016).

The pharmaceutical industry has in some ways replaced the coal industry as it extracts from the social fibers of the community rather than the depleted and hard to reach coal seams once sacrificed to corporate absentee land and mineral owners. Higher rates of heroin and prescription opiates use are reported in coal mining areas compared to other areas in Appalachia, and they are increasing at faster rates over a period of time as well (Zhang, Infante, Meit & English, 2008). After reviewing hospital admissions from 2000-2004, Zhang et al. (2008) state,

While less than 10 percent of admissions (7.34%) from non-coal-mining areas were in distressed or at-risk counties, more than two-thirds (67.59%) of admissions from the coalmining areas were in distressed or at-risk counties. None of the coal-mining area in Appalachia included competitive or attainment counties (p.170).

The study also found that almost all cases had household incomes below \$35,000 while outside coal-mining areas, those admitted for substance use had significantly higher incomes. Slightly

more females were admitted to treatment in coal-mining areas compared to other areas of Appalachia as well (Zhang et al., 2008).

Community development is aligned with alleviation from the devastation and the opioid drug market has taken off both legally through “pill mills” or pain management clinics that have operated with limited medical professional oversight and through an illegal resale market. Tennessee had 187 pain management clinics in at the beginning of 2017 (Mutter, 2017). Citizens have tried to stop new pain clinics by protesting and asking local government officials to stop them from coming into the area, but local governments don’t want to discriminate against businesses (Wilson, 2017). Tennessee has ranked in the top three states for most meth incidents since 2004 and was number one from 2010-2011 (U.S. Drug Enforcement Administration, n.d.). Since Tennessee formed a drug taskforce to focus on meth, Campbell County specifically has had some of the highest incidents of meth (Tennessee Dangerous Drug Taskforce, n.d.).

Drug abuse from meth and prescriptions are affecting rural areas the most. Tennessee Department of Mental Health and Substance Abuse Services (2016) reports, in the United States, from 1999-2014, “death rates from prescription drugs climbed three times faster in rural areas than it did in urban cores or large cities” (p.339). In Tennessee, “the highest prescribing rates were reported for rural counties (Tennessee Department of Mental Health and Substance Abuse Services, 2016, p.340). Social capital has changed in many ways as leaders age. Many of these rural areas have tried to strengthen social capital to curb drug use by forming anti-drug coalitions that partner schools, law enforcement and recovery programs. Campbell County has an anti-drug coalition with newsletters in partnership with schools, law enforcement and recovery programs (Campbell County Public Schools, n.d.). These efforts could be strengthened by creating public forums for visioning and addressing the root causes of drug use and treating it as a symptom of a larger societal issue. Countering the drug epidemic could be a rallying cry for strong community development and a way to further engage rural areas on what can work best for them.

Education – Human Capital

Goodstein (1989) found,

There is strong support for the position that high rates of absentee ownership are associated with low rates of education and high rates of poverty. Moreover, the significant negative impact of the coal variable on high school education indicates that the dominant position of extractive industry is important independent of landownership patterns in reducing public investment (p.527).

There is a feeling that the education and resources are lacking in Clearfork Valley compared to the counties and state as a whole. People would say that kids were urged to drop out and the drop-out rates weren't accurately reported. This was difficult to assess from a research standpoint and not the main focus of the research.

Both Campbell and Claiborne Counties have one school district. Claiborne County per pupil expenditure matches the state average while Campbell County's is 11.6 percent less than the state average at \$8,290 per pupil (Tennessee Department of Education, 2014-2015, Annual). For Campbell County's entire school district out of 5,775 students, 13.5 percent have disabilities compared to the state at 14 percent and 70.7 percent are considered economically disadvantaged compared to the state at 57.9 percent (Tennessee Department of Education, 2014-2015, Report card). Clairfield Elementary school which serves 92 students in K-8 has a 95.7 percent rate of economically disadvantaged students with a lower percentage of students with disabilities (12 percent) compared to the state. Standardized test scores for students in grades 3-8 demonstrate some lower scores than the state average in reading. However, for math and science scores were above the state average.

Campbell County Schools is comprised of two high schools, two secondary or middle schools, eight elementary schools and one alternative school (Campbell County Schools, n.d.). Those in Clearfork Valley attend Jellico High School if they are in Campbell or Claiborne County. From 2014-2015, Jellico High School spent \$8,290 per pupil (Tennessee Department of Education, 2014-2015, Report card). The graduation rate was 91.9 percent which was higher than the state average of 87.8 percent (Tennessee Department of Education, 2014-2015, Report card). The school had less "highly-qualified teachers" than the state average (Tennessee Department of Education, 2014-2015, Report card). On standardized test scores, in comparison to the state, a couple courses stand out. Chemistry and algebra test scores were far below state averages. Students at Jellico High School score lower in every category on the ACT than the Campbell County average and both of those are lower than the state average. Students in Tennessee qualify for HOPE Scholarships if they achieve a 21 composite on the ACT or a 3.0. Statewide 37.4 percent of students are eligible based on their ACT scores while Jellico High School only has 13.5 percent who are eligible based on their ACT scores below the other high school in the county which is 21.8 percent. For a school that has 74 percent of the students classified as economically disadvantaged, qualifying for scholarships is important for attending higher education institutions.

For Campbell County Schools, 63 percent of teachers participated in the 2016 Tennessee Educator Survey (Tennessee Department of Education, 2016). In response to “My students spend adequate time within a digital environment to prepare them for today’s world,” 49 percent of respondents disagreed or strongly disagreed compared with 32 percent for the state. 39 percent disagreed that they have someone to help them integrate technology with instruction compared to 31 percent for the state. By an 11 point margin on every question regarding the new tougher standards on testing called TN Ready, respondents disagreed with its effectiveness. Less than 45 percent of teachers responded to the survey for Jellico High School, so the responses are not available. White Oak Elementary which serves K-8 students on the Campbell County side of Clearfork Valley had no teachers respond that they disagreed about the supportive climate of the school and administration a marked difference from state responses. They also demonstrated that teachers are supported. 72 percent of respondents disagreed that their students “spend adequate time within a digital environment to prepare them for today’s world.” All teachers at Wynn Habersham agreed they had adequate technology and were incorporating it into classroom instruction.

In 1999, teacher pay for Claiborne County was 98 percent of the state median and Campbell County’s was 92 percent of the state median (Tennessee Advisory Commission, 1999). Campbell County’s cost to equalize was \$985,525 and Claiborne’s was \$226,725 (Tennessee Advisory Commission, 1999). Claiborne County Schools ranked 122 out of 137 school systems providing median teacher pay data for 2014-2015 (Tennessee Education Association, 2015). Campbell County Schools ranked 102 (Tennessee Education Association, 2015).

Claiborne County has one school district with three high schools, two middle schools and seven elementary schools. Claiborne County schools mirror Campbell County in the percentage with disabilities and have a slightly higher percentage of economically disadvantaged students at 77 percent. From 2013-2014, 60-70 percent of Campbell County students were enrolled in at least one career and technical education class and 70-80 percent of Claiborne County students were enrolled (Tennessee Council for Career and Technical Education, 2014, p.30).

Economic Development

The Clearfork community has been an advocate for itself when it was overlooked by state officials. In 2014, Campbell County was the only county to receive brownfields grants in the state (Wilder, 2014, June 4). The EPA awarded \$400,000 to the county to conduct 20 assessments (U.S. Environmental Protection Agency, 2014). By attending an ARC Brownfields

conference community leaders in Clearfork Valley learned Campbell County was about to lose the grant money if they did not identify more sites (Appalachian Regional Commission, 2016). TNACE subsequently identified several sites in Clearfork Valley that would qualify and promoted them to the County Executive (B. Swinford, personal communication, September 15, 2016). When the county gains funds through external efforts such as Clearfork Valley's residents pushing for POWER Initiative funds for broadband development, it is slow to act to implement. Campbell County was awarded \$35,000 from the Partnership for Opportunity and Workforce and Economic Revitalization (POWER) grants for a broadband feasibility study on October 15, 2015 (U.S. Department of Commerce, 2015). This was at the bequest of Clearfork Valley residents who rely on dial-up and satellite services for internet. The contractor for Sierra Club and Clearfork Valley residents brought the funding opportunity to the county while doing a presentation at the County Commission to get a resolution passed in favor of the RECLAIM Act that would release abandoned mine land funds for economic development in areas suffering from coal related employment decline. Prompted by those same groups to do a story about the receipt of funds, the *Knoxville News Sentinel*, a newspaper covering the nearby metropolitan area, reached out to Campbell County for a comment. County Commissioner Sue Nance said,

There's not employment for them once those (coal) jobs go away. Many of the coal mining employees were great at the jobs they did, but didn't have job training in other areas. It's just unfortunate they weren't taken care of later. Without high-speed internet service, it's hard to attract new businesses to those areas (Collins, 2016).

Claiborne County Mayor Jack Daniels said,

Our community, right now we could use a new hotel. We've got a perfect location for it. The county also is working to create a new industrial park, which would help attract new businesses to the area, Daniels said. Federal funding could be used to help buy land for the park. (Collins, 2016).

Community members in Clearfork Valley have been working to get a consultant for the feasibility study. The consultant did not show up to the planned meeting with Campbell County officials for unknown reasons. Campbell County has yet to secure a contractor or spend the money (TNACE meeting, January 28, 2016) (SEAD meeting, August 27, 2016).

Campbell County has hired an industrial recruiter heavily hanging its hopes of economic development on the small population centers away from the remote reaches of the coal-impacted Clearfork Valley.

Gaventa (1980) found that Claiborne County could generate only one-third of its revenue from local sources, while at that time the average county could generate two-thirds of revenue

from local sources. Gaventa (1980) states, “And while 43 percent of the budget of an average county in America is generated from the property tax, Claiborne County raises only 26 per cent by this means” (p.138). In 1984, Campbell and Claiborne County received half of their local revenues from federal funding (Leuthold, 1986). Campbell County’s Real Per Capita Assessments have grown by 56 percent since 1986 (Chervin, 2009).

Campbell County generates 43.6% of its revenue locally as of 2015. State revenue accounts for 43% and federal revenue accounts for 12.6% (Tennessee Advisory Commission on Intergovernmental Relations, n.d.). Claiborne County generates 45.7% of its revenue locally while state revenue accounts for 44.8% and federal revenue accounts for 9.5% of its budget (Tennessee Advisory Commission on Intergovernmental Relations, n.d.). Previously coal-dependent counties in Appalachia are facing budget shortages as coal severance taxes are decreasing. Local government officials in Campbell County are accustomed to receiving an average of \$300,000 of coal severance taxes annually, half of which goes to the school district (Wilder, 2014, April). Claiborne County recently stated they have implemented a wheel tax to balance the lost revenue from coal severance taxes (Collins, 2016). This is a regressive tax that places a burden on lower-income populations as it constitutes a greater share of their income than higher-income populations.

Campbell and Claiborne Counties are also receiving even less property tax as the state purchased a lot of the property from absentee landowners no longer pursuing coal production. Tennessee Wildlife Resources Agency (TWRA) is now managing much of the land that was once owned for coal production as the Tackett Creek Wildlife Management Area for hunting and fishing (see Figure 4.3). While this is an opportunity to promote tourism through lodging and other hospitality service for the residents in Clearfork Valley, tourism development money flows elsewhere. Clearfork Valley communities are literally left off the map of places to visit. The Claiborne Economic Partnership does not include the Wildlife Management Area on their new map promoting tourism in the area, though they do include Clearfork Community Institute (Claiborne Economic Partnership, n.d.). Tackett Creek WMA is not on Claiborne Economic Partnership’s small list of attractions and is also not promoted by Campbell County Chamber of Commerce though other Wildlife Management Areas in the county are (Campbell County Chamber of Commerce, n.d.).

An Appalachian Regional Commission funded project promoting gateway communities that “border national and state parks, wildlife refuges, forests, historic sites, wilderness areas and

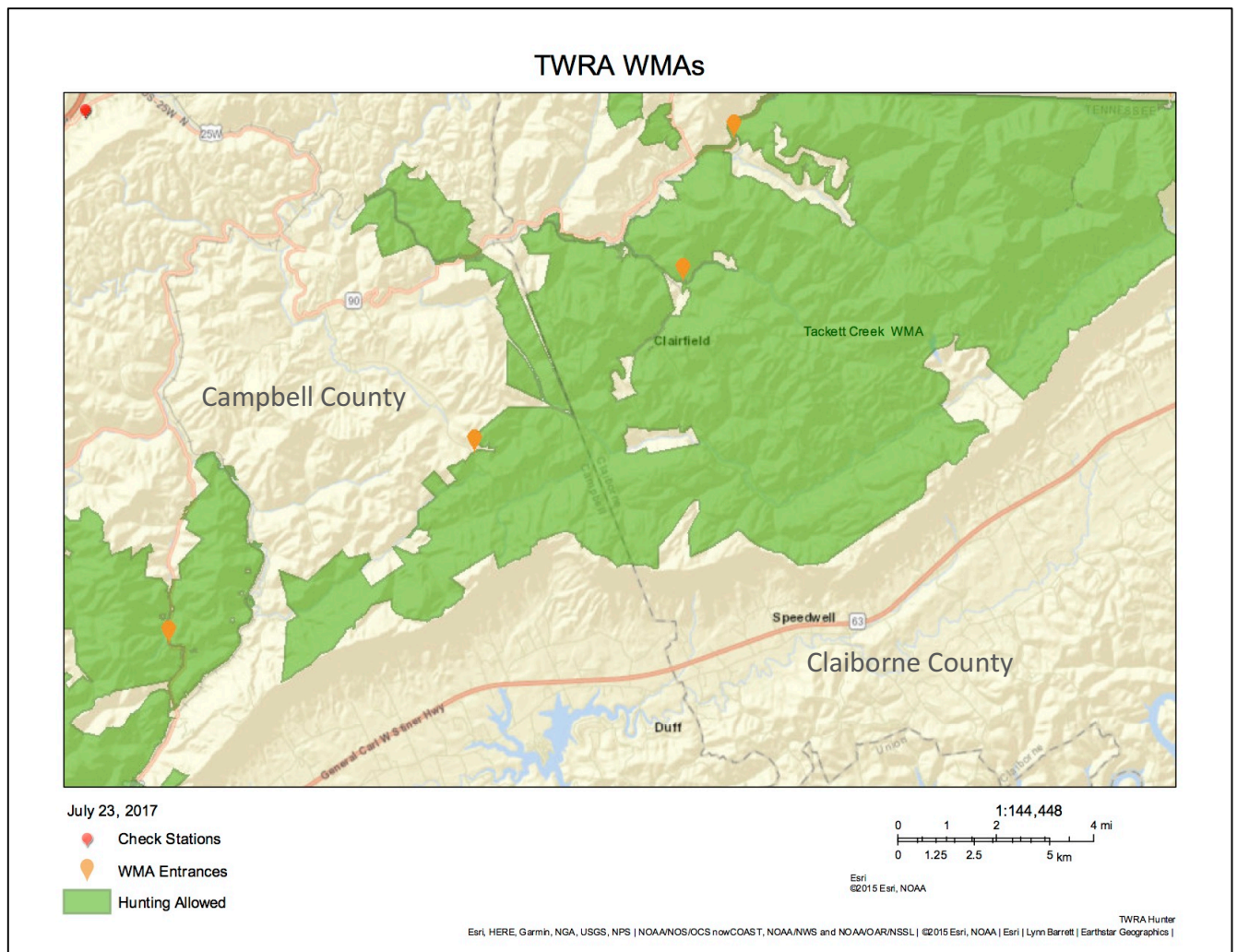


Figure 4.3- Wildlife Management Area- Clearfork Valley

(Tennessee Wildlife Resource Agency, n.d.)

other public lands” worked with nearby Cumberland Gap to identify surrounding areas of promotion and skipped over the Wildlife Management Area in Clearfork Valley (Brackett & Briechle, 2009). This continues development patterns first set up by the American Association Limited Coal Company. Gaventa (1980) found, “The profits that did not go to the shareholders were invested, not within the valley but across the mountain, for the development of a Holiday Inn for tourists at the Cumberland Gap, and a marina and golf course,” and as the company stated “to attract the wealthier citizens of Pineville and Middlesboro” (p. 132). The initiative’s intent is to assist communities in enhancing natural and historic assets and to emphasize the role of the arts in the development of a comprehensive strategy. As technology advanced with the use of internet in unison with marketing and entrepreneurship, these communities lacked built capital

of broadband internet to even compete in the new global marketplace. Just as electricity and water infrastructure were slow to reach Appalachia, many rural areas continue to use dial-up or satellite services for internet. According to the Federal Communications Commission's latest figures from 2014, 15 percent of Tennesseans lack access to broadband, 24.4 percent of Campbell County residents, and 96.3 percent of Claiborne County residents. Just as before, when services were not provided to the residents of the valley, they forged their own way ahead. The TNACE group which is also a part of S.E.A.D. is driving the organization's effort to affect enabling legislation in Tennessee for rural broadband access, conduct research and network with other states with the goal to lay their own fiber optic cables and start their own internet company.

An effort is underway to update the 1981 Appalachian Land Ownership study given the recent regional and national push to diversify Appalachia away from coal-mining. On September 30th, the University of Kentucky convened a gathering of over 70 community leaders and academics some of whom who had been engaged in the previous study. The meeting was intended to collectively engage researchers and community members on the focus of an updated regional land study by reflecting on the past land study including the research design, needs of local communities, and special attention to the new opportunity of early disbursement of abandoned mine land funds (AML) through the White House initiative to invest in Appalachia's economic diversification and support retraining of mine workers at a time when mining jobs are at an all-time low especially in areas still dominated by the industry in West Virginia, Virginia, and Kentucky. Several of the community leaders from Clearfork Valley attended the convening and worked with organizations to form the Tennessee Land Ownership Taskforce which will lead Tennessee land study efforts.

Chapter 5 - Findings & Discussion

Community Development in Clearfork Valley: Present and Future Prospects

Community Development Challenges in Appalachian Coal-Dependent Communities

Community development practitioners are dependent on resources like many other professions including time, money, communication channels and travel capabilities. This requires support from institutions such as governments, universities, non-profits or foundations, which are often separated by varying degrees from the community of focus. This can present a challenge when a community lacks the resources to achieve support from outside the community. Making connections and grant writing requires considerable time and effort that economically challenged communities find hard to manifest especially when they are serving an important role in the community by providing for immediate needs such as food, clothing, housing and transportation. They also face the challenge of a possessing a substantial track record when competing for much needed resources. Community development extends beyond services and often relies on proven strategies of success. Small nonprofits in communities facing declining employment and population with big ideas and roots often lack the community development experience that funders are seeking. Yet, these are the very organizations, albeit small, that know the people and the problems they face. They also know the less tangible assets such as social and cultural capital.

Much of the capacity of a community is challenged by the number of leaders and the commitments they make to solve the immediate problems and work toward the longer –term vision of a better quality of life for the community. In smaller communities, there are less service agencies and those that do exist have less resources and capacity. In Clearfork, community leaders occupy the role of providing crisis assistance such as transportation, childcare, substance abuse counseling, food, and housing and the countless other daily needs that people require to live. Many rural communities in Appalachia including Clearfork Valley have aging populations which need increasing levels of services and are often now raising grandchildren due to the increased use of opioids in child-rearing adults. Community leaders are under tremendous strain and are expending much of their time adapting to increasing need since they are often the ones with the networks to pull together services or happen to be the only person with a car and gas money.

Clearfork Valley leaders consistently illustrate their views of the world through the lens of urban and rural. They talk about the connections with urban areas through the long history of supplying coal to TVA in Knoxville, the nearest metropolitan area, and they view a distinct divide between rural and urban places by way of access to jobs and the “cash economy.” Part of the approach has always been to explore those connections and divisions as a system that has been imposed and not one that was naturally designed.

Campbell and Claiborne Counties are both listed as distressed by the Appalachian Regional Commission which means they have the lowest level for a required match (20 percent) for ARC grant funding (Appalachian Regional Commission, 2016). While ARC matching fund brackets are set up to prioritize distressed counties, through examination of program awards, this system is not working to create an equal or even preferential distribution of funds to distressed areas. In its 2016 performance review, ARC reports 79 percent of its funds primarily or substantially benefitted distressed counties or areas (p.18). In 2016, ARC reports 87 percent of their funds in Tennessee “will have a direct impact on” distressed counties (Appalachian Regional Commission, n.d.f). Awarded projects do not have counties or economic categories listed making this difficult to confirm. Clearfork Valley residents recently learned that a Knoxville job incubator received \$500,000 in Power Initiative funding from ARC to extend entrepreneurial support and training in coal-impacted communities (Launch Tennessee, 2017). Residents have not heard from the organization but are planning to meet with them. This is just another example of how distressed and coal-impacted community stakeholders could be weaved into a long-term strategy but are not. Expecting communities that are already strapped for resources to find all of these opportunities as Clearfork Valley has been able to do so far is not realistic or attainable.

Since residents and community leaders there have limited capacity for grant writing especially at the levels required for large federal grants, it is important to explore the history of the community’s interaction with local government on these funding sources. If the local government is focusing their limited resources on developing tourism and workforce training with this lingering central place and industrial recruitment strategy, communities such as those in Clearfork are automatically left out of the process to secure outside resources which are often awarded not to small community groups but to local government bodies.

Many of the grants issued from ARC serve metropolitan statistical area business incubator programs. There does not appear to be a guideline within ARC to ensure a certain

proportion of funding goes to rural areas perhaps with the underlying assumption that investment in the more populated areas will spur economic growth in the rural areas. The Appalachian Regional Commission should factor distressed coal-mining communities into all programs – as exemplified by the failure to address the distressed area of Clearfork valley when funding a nearby project. Residents of these areas should have direct input on the allocation of funding in their state and county.

Gaventa (1980) states,

The national response to the failure of these reform attempts has been a shift in concern from poverty, remedied through full participation of the poor, to development, achieved through planning by a professional elite. For Appalachia, the Appalachian Regional Commission (ARC) with a staff of over 100 headquartered in Washington, was created to direct ‘a combined federal and state effort to solve the region’s problems’. Locally, seventy development districts—multicounty planning units – were set up to chart the growth of 397 Appalachian counties. Both the ARC and development districts alike have been criticized for taking the politics of poverty further away from the region’s poor. Issues like those in the Clear Fork Valley have failed to appear on the agendas of these extra-local governmental institutions, just as they did at the county courthouse. As the *Courier Journal*, Kentucky’s largest paper, has written, the ARC has evaded, ‘the whole question of economic colonialism –perhaps most serious since absentee ownership and control of Central Appalachia’s one-industry coal economy is the tap root of the area’s problems’. It has ‘failed in Central Appalachia where success was desperately needed’. *Courier Journal* (11 April 1973) (Gaventa, 1980, p. 163).

I also found while undergoing this research that census tracts need to be utilized more heavily as attention turns to coal-dependent areas in Appalachia to increase understanding of development impacts and further promote allocation of resources to these often overlooked remote and rural areas.

As environmental advocacy groups and other non-profit organizations are becoming involved with community development for the first time, these organizations are often not expanding the number of people involved and are relying on community leaders they’ve worked with before who have partnered with them on environmental issues. They need to partner with other organizations or broaden the scopes of the projects to promote the inclusion of the entire population that has been so often left on the fringes of any development decisions. By taking these steps, this can affect the participation of the whole community and maximize the ability to achieve long-term results with a legitimate community-driven plan instead of contributing to the legacy of clientelism in Appalachia. Outside organizers or community developers even if working with a group for a long time may hold key documents such as visioning that are not revisited or managed by the whole group. Limited funding and resources for groups that work with

community members has affected their ability to do outreach and leadership training. Private foundations that are funding diversification work in Appalachia could allocate a portion of the funding for these groups and training programs.

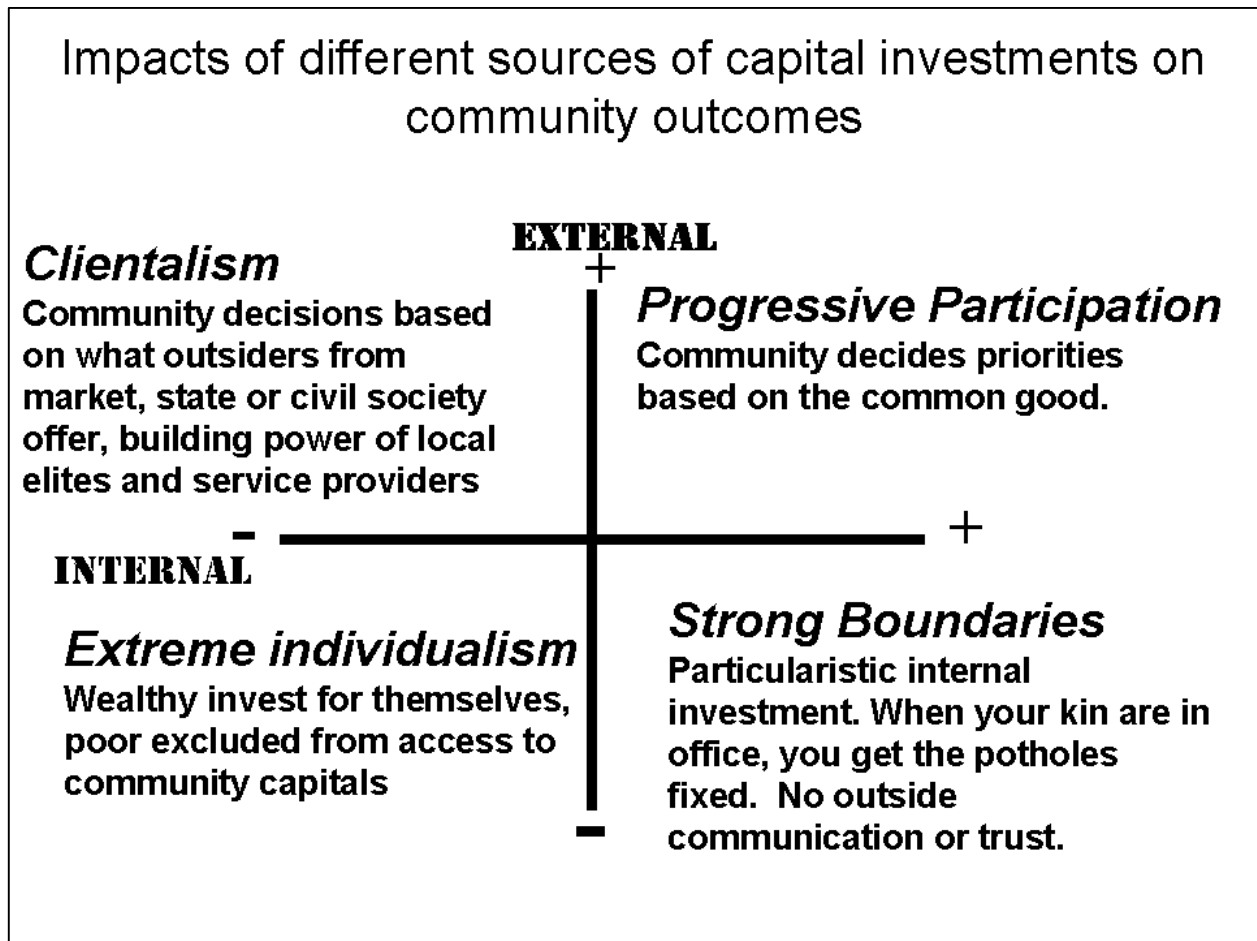


Figure 5.1- Impacts of Capital Investment on Community Outcomes
(Flora & Flora, 2014)

Table 5.1- Clearfork Valley Capital Flow

	Social	Financial	Built	Human	Political	Cultural
Natural	+depend on each other	+near WMA	+wood for buildings and heating	+People learned how to use herbs	-remote and mined	+Mountains embody how people see themselves
	+community gardening	-WMA not promoted	-floods and mudslides block and deteriorate roads	+People know plants and animals and how to grow food	-less pop. leads to less political influence	+forests and mountains linked to identity

	Social	Financial	Built	Human	Political	Cultural
	+orchard	-land used for mining and money		+Furniture and craft makers	+ RECLAIM legislation, engaging local, state and federal government	-water quality and land affected by mining, people afraid and hopeless
	-illness and drugs affecting upkeep of community land				-far away from central town where decisions are made	+mountain music
	+Annual Earth Day festival				-coal severance tax not used to restore impacted streams	
Social		+work together when people need money	+Built clinics and renovated school through shared labor	+Many classes at Clearfork Community Institute	-distrust in politicians	+Annual Earth Day festival
		-theft	+Houses in land trust	+Quilting as social activity and generational skill learning	-representatives not working for community	+museum and archives in CCI
		+leverage money through networking and partnerships	+Water utility	+community	+coming together gets results	+mountain music
		-larger groups not investing in community though using community to get money	+Broadband planning		+Duff road repaved	+Craft sales
		+OSMRE VISTA, partnership funded	+Joined together for volunteer fire departments			-Racism affected ability to link between groups
		+replace money with goods and services	+Duff road repaved		+Support for POWER funding	+Art and quilts tell stories
			-coal company demolished building used for health clinic			-Environmental and coal lingering tension
			-Fires to retaliate or from meth			

	Social	Financial	Built	Human	Political	Cultural
			labs			
Financial						
			+Outside funds for clinic, CCI, land trust, water utility	+coal severance funds used for schools	+coal severance funds used for schools	+Barter and trade culture
			+Lodging for volunteers	-lack of technology for education	-coal severance funds not used for road repair in coal mining area	-cash poor, feeling of otherness
			+Lots of buildings, could rent	+individual skills leveraged to make money	-not able to participate in expensive conferences with economic development or government officials	+got to fight for what you get
			-Lack of funds for maintenance		-representatives not working for funds or resources for community	-Capitalism extracts from rather than supports way of life
			-lack of ownership, clinic torn down by coal company		+Supportive legislation such as RECLAIM and POWER	-Alternative economy, drug trade
			+Mountain Family Resource Center			
			+Land trust housing		-lack of money, difficult to make trips to county offices and meetings	+Volunteers and universities drawn to area because of culture
Built				+CCI, place for adult classes and events to showcase skills	+coal severance funds not used for schools	+CCI place for events
				+Elementary schools	-coal severance funds not used for road repair	+Woodland land trust community

	Social	Financial	Built	Human	Political	Cultural
				-Poor roads affect school attendance		+Community togetherness helped to create buildings
				+Construction skills allow residents to build for themselves		-coal company demolished building, affected group efficacy
				+Places for workers, fire department, P.O., local businesses		+Churches, spirituality and religion
Human					+experts, teachers know how to talk to politicians	+generational skill transfer
					-not enough professionals for large influence	+unique skills, growing food, making herbal products, ginseng
					+coal severance funds used for schools	
Political						-officials view it only as periphery extraction region
						+coal mining heritage is something county is proud of
						+Appalachian region has a federal government entity to represent it
						-ARC decisions made by governors, no citizens council
						-Appalachian region only gets national political attn. around coal and poverty
						-county values coal-mining culture more than holistic Clearfork Valley culture
						+have a representative

Clearfork Valley Capital Flows

I found that built capital stemmed from internal and linking social capital. The ability to harness social, cultural and human capital to gain financial capital for built capital compensated for lack of access to political and natural capital. Health clinics were built and maintained through foundation and university funding. The community was able to acquire some land and promote clinics through health councils to maintain them. The community started Model Valley CDC, Woodland Community Land Trust and Woodland CDC. There was also a folk school at one point that burned. All of these entities were able to leverage funding to help purchase and build the Clearfork Community Institute which relied on local labor and university volunteers based on the previous connections with Vanderbilt Student Health Coalition. Woodland Community Land Trust may likely be able to utilize Brownfields funding for the AML site and the community worked with the local government to get POWER Initiative funding for a broadband feasibility study. Lack of political capital has slowed that process and made it more difficult to get the road in Duff repaved.

Individual financial assets are largely dependent upon conditional transfer payments and subsistence income including Social Security, food stamps, electric bill support, Veterans benefits, Medicaid and Medicare and unemployment. Because of this people have unregistered agricultural and natural products businesses that they are justifiably reluctant to expand out of fear of losing their transfer payments. It is reasonable for them to assume with the current lack of infrastructure that they would not be able to fully replace what might be lost from transfer payments which would result in a decrease in quality of life. Other alternative markets were created including wildcat mining and the drug trade. These had negative impacts on social and cultural capital while many go to jail, lose their children, or die.

A cash poor economy resulted in more dependence on a limited few in the community with traditional wage incomes. Those with traditional wage incomes are often low-wage service providers, have skills to write grants but are strapped by providing secondary services like transportation, help with children, the elderly and disabled.

Land insecurity compromised future individual financial capital investment because it limited individual ability to invest in the community for the long-term. By comparison, when the community controlled financial and built assets, they became other types of capital. By acquiring 450 acres, they were able to start Woodland Community Land Trust, build 16 houses, and with

that received a grant for and started an apple orchard. They can also use the land to apply for AML/ Brownfield reclamation. The community was able to renovate the closed school after consolidation and create a community center called Clearfork Community Institute which is used for social capital bridging and bonding, though it can be exclusive as well. Health clinics improved the health of the community and brought medical professionals to the area which then helped to form SOCM to get financial reinvestment for the community through coal severance taxes and other regulations on strip mining. Human capital increased bonding social capital which increased linking social capital across five counties dealing with strip-mining issues.

When capital was not controlled by the community it had negative effects for other capitals. For example, the first clinic, Clear Fork Clinic was started through War on Poverty funds and local volunteer labor. However, when the program and therefore funding ended, the coal company which still owned the building tore it down. This negatively affected human capital by way of health and cultural capital or the group's feeling about what they could accomplish. They had hoped to start a wood pallet factory and even sent people for training funded by TVA, but the coal company would not sell the land. The financial capital they gained through their political efforts by way of the coal severance tax was used county-wide and not directed for education parity in Clearfork Valley or to repair roads that had been heavily impacted by hauling coal or stream restoration as spelled out by law.

Different values compromised bridging social capital within the community. Cliques formed based on the long struggle between coal mining and environmental stewardship. There are distinct communities within Clearfork from the legacy of coal camps and many of the nuns that entered the community defined and promoted the community as Clearfork from an outsider and environmental perspective. Community members also had different values about historical race relations which affected their ability to work together. One of the stores sold Confederate flags and some community members boycotted. The store owner had a problem with the devastating clear-cutting, but because of these different values, residents did not work together to address the issue. Kinship ties had both positive and negative effects on social capital. Residents of the land trust were related to people off the land trust. When there were issues with their upkeep of the land, this affected the whole leadership group.

There were many mentions of buildings or homes that used to exist but had been burnt and tales of theft. This affected social, built, and human capital and the development of new projects such as ginseng cultivation and the orchard.

Cultural capital was both a positive and negative for investment. Local government development programs ignored the area as a periphery extraction zone of the county. Universities and foundations are drawn to the area because of the culture and mining legacy.

Limited financial capital encouraged bridging social capital as Woodland and the Clearfork Community Institute partnered to host the OSMRE VISTA. S.E.A.D. is also now involved in the continued support of the VISTA position. This allows CCI to host programs for community members in Woodland Land Trust and the rest of the community and have someone who can coordinate all the events. This manifested in human and cultural capital as classes on how to can, Pie Fest, Earth Day, the Christmas Craft Fair and community gardening days bring community members together. This also allows a spot for social service agencies to deliver aid to the community. Mountain Family Resource Center maintains a head start program started through War on Poverty funds.

A lot of the historic linking social capital and financial capital originated with one nun, and there is concern a lot of the contacts are not transferring. Lack of land ownership continues to be an issue for the valley, and TWRA controlling much of it that is no longer mined has further compromised access. Absentee landholders at some points let locals use the land for subsistence by hunting and foraging. The Wildlife Management Area now wants locals to pay permit fees to do these things and has fined some people.

Capacity is limited because the same small group is providing crisis assistance and conducting community development activities. They have had difficulty applying for technical assistance and linking has been unsuccessful in leveraging financial capital. Direct services could be seen as an asset and used to expand leadership group by developing volunteers.

The community while proud of their culture has also adopted some of the stereotypes about their area which has affected their willingness to engage in certain types of human capital activities. Political capital has been a source of obstacles by allowing coal companies a discounted rate on property tax for so long and not re-investing the coal severance tax that Clearfork won back into the community. Political capital is helpful when social capital has been invested to affect it such as RECLAIM and POWER. Governments and agencies can become more accessible by spending time in rural communities, creating citizen advisory councils with representatives from the communities, and including them in strategic planning that can direct outside resources to these often-forgotten areas. It is also important to provide scholarships or wave fees for government and economic development conferences.

Reflections on Community Developers' Roles

Community development as a career is limited by time, resources and reportable deliverables. This can cause tension and pressure as well as not being able to incorporate lessons about the whole community. This emphasizes the need for self-help approaches rather than technical assistance so the community can build on learned skills after paid community developers exit. The self-help approach or project limitations should not interfere with making connections for the community or bringing in consultants for project-centered tasks to move a plan forward. This respects the community's limited capacity and helps them prioritize what they want to learn how to do and what they just want to get done. It is important to include a power and access analysis because of the long tradition of clientelism and company control of government in coal-dependent communities. Governments or agencies control the resources for community development and are still using them for industrial recruitment and focusing on central places. Community developers can be a bridge for the community but must recognize these dynamics and the history of the community's relationship with decision-makers. Clearfork Valley has demonstrated that political capital is not required to make create very successful projects and community development.

Community development success requires practice and time and is best done through a train-the-trainer approach especially when the developer does not live in the community. It is important to focus on the whole community rather than certain issues. It was difficult to maintain a focus on assets and positives with the Appreciative Inquiry approach when there were so many crises intervening. Skilled practitioners will likely be able to focus on assets while acknowledging and building solutions to problems into capital investment toward the community's long-term vision. I found the best community development skill is asking good and unbiased questions to garner the experience and values of community members to reinforce their inherent abilities.

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Appendix A - Asset Mapping Session

Asset Mapping Session 1
January 5th, 2016 at 1pm
Clearfork Community Institute, Eagan, TN

5 mins - Brief Introduction – Amy Kelly, originally from Kingsport, TN, family roots in Eidson near Sneedville and Greeneville, TN. I am a student in Community Development with a rural focus, Midwest consortium of schools with strong extension and community development ties. Asset mapping through Community Capitals Framework- identifying assets and how they can overlap to create opportunities for residents to create economic development opportunities. I also work at Appalachian Voices. We have an hour to get started in a process I hope to develop with you all to 1) engage others in the community 2) map assets 3) create an action plan and research that might be used across Appalachia for community engagement in economic diversification protocols. This is the first part of a workshop/ community planning series that you can create and drive. I am here to assist you and share what resources I have.

10 minutes – Where is your community?

Clearfork Valley
Clairfield
Duff
Jellico

30 minutes -Identifying Positive Assets -

5 mins - Introduction:

*Speaker and Recorder – Honoring the voices and experiences in the room
Some of us easily speak up with our thoughts and experiences and some of us are quieter and more contemplative keeping those thoughts and experiences to ourselves. This exercise makes room for everyone to practice each of these roles as a speaker and listener or recorder. One of the ideas is that this will allow us to practice how to interact with others in the community to elicit positive stories because everyone has them.*

In a pair, each person will be the interviewer recording what the other person says (either in writing or picking out key pieces to remember). After three minutes, the roles will switch. Is everyone okay with that?
I'll be the timekeeper so everyone can participate.

6 mins- Paired Exercise:

Here are the questions (written on the white board).
'Tell me about a time you felt really good about being part of this community?'
'What was it about that situation that made it work so well for you?'
'What is it that you value most about this community?'

10 mins – Large Group Sharing:

What did you identify as positives in the community?

Amy record on the whiteboard and sort by capital: Human, Social, Cultural, Financial, Built, Political, Natural

5 mins – Community Capital Framework Handout

Capital is another word for an asset you can invest in. Here is a list of the 7 community capital categories I used to sort the assets you identified with some examples of what might be identified under these categories.

4 mins – Large group reflection

What do you notice about what people identified?

Are there other assets these categories help you to identify?

10 mins - Next Steps:

What do we want to leave this session with?

What do we want to do with this? One opportunity is asking others in the community these same questions to get a broader response and also it can be a way to invite them to the next session.

Have copies of these questions that people can take around. **Mary Jo at the Utility board has offered to let us ask people when they come pay their utility bills on Jan. 11. Need to confirm this.** Would anyone like to help with that?

Are there other places we could ask these questions or events where people are gathered before the next meeting? We can also post an invitation for the next session at that meeting.

Next time I would like to focus on the vision for the future. How would you like your community to be? And we will then focus on connecting what we have now as assets to what we want the community to be like.

Materials:

Dry erase marker

Clean white board

Pens/ pieces of paper for recording

Timer

Community Capital Handouts

Handouts with asset questions – so people can interview others after the session

Appendix B - Asset Mapping Notes

Sent by April Jarocki – OSMRE VISTA
Asset Mapping Meeting Notes - January 5, 2015

In attendance; Amy Kelly, Tonia Brookman, Marie Cirillo, April Jarocki, Bonnie Swinford, Carol Judy, Sam Marlow, Gary Garrett, Marie Webster, Vickie Terry, June Pyle

What does community mean to you?

Clearfork Valley- Fonde/Frakes to Morley

Carol- unincorporated communities but identifies more regionally now, with trade and people she knows

Marie C.- where she works but then it changed when mountain womens exchange began, opened up to KY and Jellico

June- Based on where you live

Gary – shaped by the mountains

Questions

1. Tell me about a time you felt really good about being part of this community?
2. What was it about the situation that made it work so well for you?
3. What is it that you value most about this community?

Responses broke down into capitals

Social

People coming together to build

Linking to outside resources/ people (ex. academia)

Willingness to help others

Neighbors supporting each other (ex. after fires and floods)

Kindness

Feeling a part of the community/ can feel isolated if not engaged

Giving back rather than just taking

Sense of freedom and space (natural)

(below added as whole group)

Feeling part of the community/ can feel isolated if not engaged

Built

Parent resource center

Fire dept in White Oak (worked together to get a volunteer fire department)

Public Water utility (social and political)

Clinic

CCI

Cultural

Small family feel

Hospitality

Human diversity

Freedom in nature (people are a part of)

Human

Sharing knowledge (herbs, etc)
Building on shoulders of others
Variety of skills
Hunter/ ecotourism
University service projects
Directly involved with academia
Giving back
(below added as whole group)
Skills still here (generational skills/ old day skills)
Building on shoulders
Hunters/ eco-tourism
Teachers and local experts

Natural

Herbs
Numerous Trees (“more trees than people”)
Nature
Beautiful
Wilderness

We are missing political and financial capitals in our personal stories.
Political- Coal Ash, political learning, getting to know the politicians
Financial- non profits (brings money in but it doesn't remain)

Financial (added in large group after capital sorting)
Non-profits bring money in (it may not remain)

Political (added in large group after capital sorting)
Coal ash community coming together to push officials
Political learning
Know representatives

Process

Have a vision
Identify assets
Line up assets with vision to figure out how to get to where you want to be.

Next Steps

Outreach
Model Valley
Duff Group
PTO's
Celebrate Recovery

Appendix C - Newspaper article

**TWO TELL OF
BEING WHIPPED**

**Police Are Implicated In
Flogging Story Of Two
Union Officials.**

Knoxville, Tenn., Jan 20 (AP)—
Two representatives of the National
Miners' union, Joe Weber and Bill
Duncan, came here Tuesday with a
story that they were arrested in
Tennessee last Friday, taken to
Harlan county, Kentucky, and flog-
ged near the town of Lynch.

They said they were beaten into
insensibility and they displayed
wounds on their bodies which they
claimed were inflicted with clubs
and sand bags.

Weber Tells His Story

Weber told the following story:
He and Duncan were arrested at
Cumberland Gap, Tennessee, by
Deputy Sheriff Hugh Rider, of Claiborne
county, who called Harlan,
Kentucky, on the telephone and
said, "We've got your two men."

Sheriff Frank Riley, of Claiborne
county, was notified and he also
talked with Harlan, Weber assert-
ed.

Three men then came from Har-
lan and took them to that town.
There they were turned over to four
men "dressed in leather coats and
carrying two pistols a piece."

Beaten And Left On Mountain

"This is the end of you," Weber
quoted one of the men as saying.
Another group joined their captors
at Lynch, he said, and conducted
him and Duncan up the side of a
mountain and beat them.

He declared the men left them on
the mountainside and they remain-
ed there until daylight, finally mak-
ing their way to Appalachia, Vir-
ginia. In that town they were
given succor by friends and they re-
mained there until their wounds
improved.

Two tell of being whipped, police are implicated in flogging story of two union officials. (1932, January 20). *The Gettysburg Times*, p. 2. Retrieved from https://news.google.com/newspapers?nid=2202&dat=19320120&id=psQIAAAIIBAJ&sjid=m_UFAAAIIBAJ&pg=4385,993440&hl=en

Appendix D - Picture Burnt Trailer



Woodland Community Land Trust had just purchased this lot with a trailer. They were notified from a neighbor that the trailer had burnt after people had been inside.

Kelly, A. E. (Photographer). (2016, December 29). *Burnt trailer*. [photograph]. Roses Clairfield, TN.

