

CREATING A “DIFFERENT CITIZEN”: THE FEDERAL DEVELOPMENT  
OF THE TENNESSEE VALLEY, 1915-1960

by

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A DISSERTATION

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## ABSTRACT

This dissertation describes the process of cooperation and contestation by which residents, civic leaders, state officials, and federal politicians in the Tennessee Valley encouraged the economic development of their rapidly changing region. Beginning in 1916, when the Woodrow Wilson administration authorized construction of a hydroelectric dam and nitrate-producing plants at Muscle Shoals, Alabama, federal investment provided the means by which communities created (or attempted to create) prosperity by encouraging industrial development in a dying agricultural economy. The debates over Muscle Shoals led to the creation of the Tennessee Valley Authority, but federal officials found that Valley residents rejected broad-based social reorganization in favor of directed economic investment. During the “Gunbelt” defense boom of World War II, Valley leaders increased calls for development, especially at Huntsville, where the inconsistency of federal funds led community leaders to develop a modern, professional industrial recruitment campaign. In the Tennessee Valley, and across the South, the Sunbelt economy emerged as locals encouraged federal investment in order to bring development while rejecting and redirecting broader calls for social change.

Historians have only recently begun to investigate the complicated process by which the southern economy modernized in the twentieth century, but none have provided an in-depth exploration of the long-term growth of one particular region, such as the Tennessee Valley. Drawing on local records, numerous Valley newspapers, and federal records, this dissertation

traces the process by which Valley residents attempted to attract industries and businesses to the region. As such, this research provides insight into the birth of the modern southern economy.

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## INTRODUCTION

“Paralyzed by a Past No Longer Relevant”: Writing the History of the Sunbelt<sup>1</sup>

When she returned to Sacramento in the heart of California’s Central Valley, essayist Joan Didion discovered that a remarkable transformation had overtaken the region she thought she knew. In the days of her childhood during the 1930s, Didion’s Sacramento lay in the midst of “the richest and most intensely cultivated agricultural region of the world.”<sup>2</sup> Spring rains caused fields to burst a “brilliant ephemeral green,” and she spent her youth swimming in rivers, running over the fields of her grandfather’s farm, and attending state fairs and Sunday school. The Valley was spotted with small towns where “the seed business, the Harvester franchise, the hotel, the department store and the main street [carried] a single name, the name of the man who built the town.”<sup>3</sup> Didion left for New York City to pursue a career in writing, and when she returned to California in the 1960s, she found the Central Valley irrevocably changed. World War II-era defense investments had spurred an economic boom along the West Coast. The “voice of the aerospace engineer” replaced the sights and sounds of scampering children and grazing livestock. The local farming supply stores remained, but the workforce had changed dramatically. At defense plants, such as Sacramento’s Aerojet General, the engineers and

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<sup>1</sup> Joan Didion, “Notes from a Native Daughter” (1965), 171-86, in *Slouching Towards Bethlehem* (New York: Farrar, Straus and Giroux, 1968), 184.

<sup>2</sup> *Ibid.*, 181.

<sup>3</sup> *Ibid.*, 173-4, 178.

technicians were “almost all of them imported.”<sup>4</sup> The physical transformation was matched by an even more profound change, a change that particularly affected Didion. The Central Valley and, in many ways, Didion herself, had been “paralyzed by a past no longer relevant.” With economic progress came profound loss. Sacramento was “a town in which defense industry and its absentee owners are suddenly the most important facts; a town which has never had more people or more money, but has lost its *raison d’etre*.”<sup>5</sup> Didion gave a grim prognosis for the Central Valley’s continuing development: “Sacramento lost, for better or for worse, its character.”<sup>6</sup>

Didion could have been speaking for a number of towns in the Tennessee Valley. Over the course of the twentieth century, the federal government lavished millions of dollars on the region in an attempt to encourage economic growth in an area that had long stagnated due to a heavy reliance on cotton cultivation and extractive, low-wage industry. Like Sacramento, cities such as Muscle Shoals, Florence, Decatur, Guntersville, and Huntsville, all in North Alabama, experienced a combination of economic prosperity and social dislocation. The transformation began at Muscle Shoals, where in 1916, the promise of a government dam and fertilizer plant inspired local leaders, Valley farmers, and national politicians to begin a dialogue on the importance of economic growth. As Congress debated the relative merits of private ownership and continued government operation, Nebraska’s Progressive Republican Senator George Norris laid the foundation for a regional planning authority centered in the Tennessee Valley. Yet at the local level, residents organized for economic growth. Inspired by federal investment, they prepared to work with the government when beneficial, and insisted that prosperity meet the

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<sup>4</sup> *Ibid.*, 175-6, 178.

<sup>5</sup> *Ibid.*, 184.

<sup>6</sup> *Ibid.*, 173.

perceived needs of the community and region. Throughout the 1920s, groups argued over the future of the regional economy, and in the process, gave rise to a plan of development that would profoundly influence the creation of the Sunbelt economy.

The fight over Muscle Shoals convinced some of the need for greater regional cooperation. In 1933, the formation of the Tennessee Valley Authority sought to provide federal leadership for such a program. Led by the idealistic Arthur E. Morgan, TVA began to address the Valley's economic problems by training and employing workers, instructing farmers in intelligent agricultural practices, and taming floods with newly constructed dams. Yet very quickly, Morgan found that even the benefits of his program brought serious complications. TVA reservoirs flooded thousands of acres along the river, covering fertile bottom lands ideal for cultivation and displacing thousands of residents out of their homes and into new communities. Many of those who relocated moved into Valley towns and cities, where they abandoned agriculture for wage labor. In Florence, Decatur, and other towns across the Valley, community leaders used TVA's emergence to ask for federal assistance in attracting new industry. One member of TVA's governing Board of Directors, David E. Lilienthal, sympathized with their demands. By the late 1930s, philosophical differences between Lilienthal and Arthur Morgan exploded into a power struggle for leadership. Ultimately victorious, Lilienthal led TVA into World War II, prepared to cooperate with the private sector in an unprecedented manner. By the 1950s, the Authority became a leading force in encouraging Valley leaders to adopt industrial growth as the most effective path to prosperity, particularly in Decatur, where civic boosters led by newspaper editor Barrett Shelton mobilized the city to action. As in Muscle Shoals, federal investment gave this southern town a completely new character.

More than any other Valley city, however, Huntsville mirrored the dramatic postwar transformation of Didion's Central Valley. The small mill town changed overnight when the Army located an ordnance plant on acres of riverfront farmland. The city's population boomed, wages rose, and community leaders scrambled to prepare Huntsville for such rapid growth. Federal money was never certain; when World War II came to a close, the government decommissioned its arsenals, threatening the city's newfound success, but Cold War missile and space programs revitalized the city. By the 1960s, Huntsville perfectly captured the spirit of the Sunbelt, with active government facilities, an array of defense contractors (including Sacramento's Aerojet-General), and a rapidly growing middle class. No longer a cotton-processing center, Huntsville became a regional nexus of high-paying, high-tech jobs, forcing the surrounding community to work ceaselessly to keep up with the economic, political, and social consequences of rampant growth.

The Tennessee Valley provides a near-perfect microcosm for the study of southern economic modernization in the twentieth century. Few, if any, regions in the United States experienced such a long-term, intensive period of federal attention and investment. Beginning in 1916 at Muscle Shoals, residents benefitted from a stream of government appropriations that transformed the entire region. In North Alabama, civic leaders and regional development organizations worked to ensure that the growing relationship between Washington, D.C., and Florence, Huntsville, Decatur, and other Valley communities continued. They kept in constant contact with their congressmen and developed close connections with government officials and business owners. Local developers built roads, schools, hospitals, and parks, hoping to prepare their communities for economic expansion. They organized municipal and regional groups with the sole responsibility of recruiting industry. Federal money poured into the South in the

twentieth century, but southerners took the lead in directing the flow. In the Tennessee Valley and across the region, southerners modernized their own economy, and by doing so, played a crucial role in the creation of the Sunbelt.

The process by which southerners embraced, contested, and redirected federally funded economic modernization is the focus of this dissertation, particularly the interaction between the local development groups, which directed industrial growth in Valley communities, and representatives of the federal government, who approved and oversaw appropriations. As the Valley modernized, however, prosperity failed to erase inherent inequalities. Development brought dislocation, driving people from the land, taxing municipal infrastructures, challenging southern mores, and questioning nearly every aspect of southern society. As civic leaders encouraged economic growth, they found themselves working to prepare their communities for prosperity. In some cases, the government called attention to southern shortcomings, forcing recipients of public funds to follow federal regulations. Nowhere was this more apparent than in TVA's encouragement of labor organization on Valley projects. In other cases, local leaders took the initiative, effecting change as a precursor to further development. Businessmen paved roads, built parks, and expanded services, all in an attempt to attract further investment, but some Valley residents challenged the government to go further. African Americans demanded full inclusion, workers called for better wages and conditions, women worked to participate more fully in the growing prosperity, and conservationists decried the environmental consequences of unregulated industrialization. Southerners played an active role in the modernization of the southern economy, both as economic developers and as critics of the Sunbelt's failings.

In her wistful account of returning home, Joan Didion bewailed Sacramento's losses: the decline of agriculture, the lack of character, the missing *raison d'être*. She certainly understood the perspective of long suffering residents, forced to give way to modernization. After all, as a "native daughter" whose childhood "disappeared" with each successive year, she was personally affected. The same sense of dramatic, unexpected change pervades accounts of the South's economic modernization. In fact, historians of the "second wave" of southern industrialization have long described the Sunbelt South as a modern economy carefully imposed on the still-fresh ruins of the Cotton Kingdom. James Cobb began the current historical discussion of twentieth-century southern economic development with his ground-breaking work, *The Selling of the South: The Southern Crusade for Industrial Development, 1936-1980*. Cobb traced the formation and growth of Mississippi's Balance Agriculture with Industry (BAWI) program, one of the first "state-supervised, publicly subsidized" development groups to pursue industrial growth in the South.<sup>7</sup>

Begun in the late 1930s, the BAWI program came of age in the postwar years as developers worked to retain defense facilities and encourage further business growth. In *The Selling of the South*, Cobb laid the foundation for future studies of the modernization of the southern economy, attributing the region's rapid growth to a combination of the expanding population, the low-wage and anti-union labor climate, and generous incentives in the form of tax concessions and government subsidies. While the favorable business environment certainly boosted state finances, as Cobb notes, prosperity failed to address the deficiencies of southern society. Concerned with industrial recruitment, developers traded short-term gain for long-term stagnation; even efforts at reform proved woefully inadequate: "[S]outhern public officials and

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<sup>7</sup> James C. Cobb, *The Selling of the South: The Southern Crusade for Industrial Development, 1936-1980* (Baton Rouge: Louisiana State University Press, 1982), 33.

promotional leaders were reluctant to risk the region's reputation for stability and conservatism on improvements and other projects that did not seem directly related to the industrial recruitment effort."<sup>8</sup> Cobb placed the credit and blame for the rise of the Sunbelt on the work of southern state leaders, but as his successors would demonstrate, southern industrialization was more complicated and more contested than he suggested.

After Cobb, historians shifted their attention from the work of state organizations to the role played by the federal government in the development of the South. In *Old South, New South*, Gavin Wright's analysis of the decline of southern cotton monoculture ends with a discussion of the South's second industrialization. Like Cobb, he positions the beginning of the modern southern economy in the New Deal; however, Wright's longer view of the transition away from agriculture allows for a better understanding of the importance of federal legislation and investment in the process. In particular, Wright cites the Agricultural Adjustment Act, which provided a monetary impetus for landowners to release tenants in favor of wage labor and mechanization, and the National Recovery Administration, which alongside government encouragement of unionization, began to erode industrial wage differentials. The New Deal doomed the isolated southern labor market, and as farmers left the plantation, business leaders turned to industrial growth, funded in part by federal defense dollars. Thus, Wright provides important context for Cobb's research. Mississippi's statewide development program came to prominence as the entire Southeast entered the national economy. Thanks to New Deal legislation and federal investment, southerners escaped their self-imposed "colonial economy."<sup>9</sup>

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<sup>8</sup> *Ibid.*, 177.

<sup>9</sup> Gavin Wright, *Old South, New South: Revolutions in the Southern Economy since the Civil War* (Baton Rouge: Louisiana State University Press, 1986), 270.

Others sought to expand Cobb's temporal placement of southern development. At a conference held in 1985 at the Citadel, Peter Coclanis, Lacy K. Ford, and David Carlton used the experience of South Carolina to broaden the historical understanding of economic modernization. Coclanis and Ford found examples of business investment in upcountry South Carolina as early as the 1920s, as cotton buyers, lien merchants, and retailers turned their agricultural profits into industrial start-up funds, encouraging a kind of economic diversification that provided whites with an alternative to the farm, even as segregated hiring practices kept blacks tied to agriculture. In the Low Country, where emancipation and outmigration severely hampered the heavy reliance on African American farm labor, development lagged and state leaders attempted to direct public funds to local improvements as a means of balancing economic growth.<sup>10</sup> Drawing on a combination of economic and sociological studies, David Carlton further elucidated the nature of South Carolina's "unbalanced" economy. He pointed to a process called "polarization," first described by Swedish social scientist Gunnar Myrdal, in which areas in the earliest stages of development tend to have a weak impulse to distribute wealth. As the South Carolina upcountry business leaders fostered development, they did so locally, allowing industry improvements to "clump" in certain areas while ignoring other areas completely. Only when the state government used its influence to encourage development, as it began to do in the late 1930s, did the rest of South Carolina compete for industrial growth.<sup>11</sup> Carlton, Coclanis, and Ford complicated the historical understanding of state-sponsored development, tracing the unequal nature of economic growth, even as Wright demonstrated the importance of federal legislation and investment in creating and sponsoring industrialization.

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<sup>10</sup> Peter A. Coclanis and Lacy K. Ford, "The South Carolina Economy Reconstructed and Reconsidered: Structure, Output, and Performance, 1670-1985," ed. Winfred B. Moore, Jr., Joseph F. Tripp, and Lyon G. Tyler, Jr., *Developing Dixie: Modernization in a Traditional Society* (New York: Greenwood Press, 1988), 92-110.

<sup>11</sup> David L. Carlton, "Unbalanced Growth and Industrialization: The Case of South Carolina," *Ibid.*, 111-30.

The 1990s produced two foundational works in the study of industrial development in the postwar era. In *From Cotton Belt to Sunbelt*, Bruce J. Schulman investigated the influence of federal investment in the South in the years surrounding World War II, arguing that the national defense effort proved a turning point in the region's modernization. He concluded that the concerted effort to improve the southern economy led to the "triumph of place over people" as the government stressed the economic development of the region over the social development of its inhabitants.<sup>12</sup> Beginning with the New Deal, federal agencies directed funds into the South, yet even as businesses moved into the region, poor farmers found themselves relegated to low-paying, low-skilled labor. With inadequate training and education, southerners watched as white-collar positions were staffed by non-southerners. Schulman expanded Cobb's conclusions on the consequences of southern development. Modernization brought a new kind of southern community leader, interested in encouraging economic growth through a business-friendly climate, moderate on civil rights, and increasingly willing to vote Republican in national elections. As Atlanta, Charlotte, and Houston boomed, other communities found themselves in the Sunbelt's "shadows," passed over by prosperity – economic imbalance on a regional scale.

Schulman traced the South's rise to parity, but Ann Markusen and a team of economists quantified the importance of the nation's economic transformation. Markusen et al. coined the term "Gunbelt" to describe the geographical effects of defense contracts on the South, the West, and New England. As companies rushed to participate in the "military-industrial complex" that emerged during the Cold War, military contractors flocked to specific regions, drawn, as the authors argue, by a number of factors, including low-cost labor, proximity to military research, and a "herd mentality" that led large companies to cluster in specific areas, including Huntsville,

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<sup>12</sup> Bruce J. Schulman, *From Cotton Belt to Sunbelt: Federal Policy, Economic Development, and the Transformation of the South, 1938-1980* (Durham, NC: Duke University Press, 1994), 206.

Alabama.<sup>13</sup> Like Schulman, Markusen and her fellow authors speculated that the “winners” were able to better sell their communities to the federal government, which in turn led to exponential growth as more and more businesses settled near bases and their contractors. As a result, the economic “remapping” led to an “investment flood” in certain communities, funded by national taxpayers, and “one of the greatest selective and for-profit population resettlements in the nation’s history” as scientists and technicians flocked to work for contract companies.<sup>14</sup> Markusen et al. lend credence to Schulman’s assessment. The coming of the Sunbelt profoundly changed the South as federal investment in industrial growth created a new economy that benefited a select few while displacing and ignoring others.

Historians from Cobb to Schulman shared one underlying assumption about the nature of southern development – each portrayed the federal government as a kind of regional booster, encouraging communities to embrace modernization in the form of defense funds, development incentives, and technical guidance. This was certainly one of the goals of federal investment in the South, and the region modernized with comparative rapidity in the mid-twentieth century, leaving behind stagnant farms for bustling factories, government-sponsored research facilities, and growing cities. The federal government’s largess created economic growth, and political decisions at the state and federal level created a fertile environment for economic development. However, in portraying the process of modernization as imported or imposed, historians missed the complicated and negotiated way in which growth occurred. Only recently have scholars begun to question this assumption. In particular, a series of essays presented in 1998 at Georgia Tech, collected and published as *The Second Wave*, delved into local motivations for

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<sup>13</sup> Ann Markusen, Peter Hall, Scott Campbell, and Sabina Deitrick, *The Rise of the Sunbelt: The Military Remapping of Industrial America* (New York: Oxford University Press, 1991), 3, 76.

<sup>14</sup> *Ibid.*, 244, 240.

development. Thomas A. Scott and Richard S. Combes focused on one industry, Bell Aircraft Corporation, which located in Marietta, Georgia, during World War II. Scott highlighted the crucial role played by Marietta's civic leaders, who actively pursued Bell by preparing the city for industrial growth and by pressuring national political leaders to assist in the project.<sup>15</sup>

Combes followed Scott's analysis with a look at the legacy the wartime plant left for the region. Though Bell left the community with the end of the defense emergency, the plant had trained skilled workers and proven Marietta's ability to support technology-based manufacturing. Soon, the Air Force helped locate a Lockheed facility in the community, providing a "permanent manufacturing presence sustained by ongoing federal contracts."<sup>16</sup> Bell and Lockheed exhibited many of the problems Schulman and Cobb noted in their respective studies of southern industrialization: an imported workforce, fickle government funds, and boosters who exhibited little concern for fundamental social improvements. However, the *Second Wave* studies brought a new, much needed perspective to southern economic development during World War II. Southerners did not simply accept an economy imposed from above; instead, they participated fully in the construction of Sunbelt.

More recently, geographer Robert Lewis questioned the importance of World War II in the transformation of the southern economy. In a careful analysis of wartime and immediate postwar expenditures, Lewis argued that the southern economy remained relatively unchanged in the years directly following the war. Addressing the commonly cited "changes" attributed to the Sunbelt South, particularly "new workplace practices" and "labor skills," long lasting capital

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<sup>15</sup> Thomas A. Scott, "Winning World War II in an Atlanta Suburb: Local Boosters and the Recruitment of the Bell Bomber," 1-23, ed. Philip Scranton, *The Second Wave: Southern Industrialization from the 1940s to the 1970s* (Athens: University of Georgia Press, 2001), 1-23.

<sup>16</sup> Richard S. Combes, "Aircraft Manufacturing in Georgia: A Case Study of Federal Industrial Investment," *Ibid.*, 33.

investment, and increased manufacturing, Lewis charged that “[few] southern places received any substantial contributions from the defense industry.”<sup>17</sup> Instead, many defense installations (including Huntsville, Alabama’s arsenal) were decommissioned, and few southern investors had the necessary capital to return those facilities to peacetime production. Throughout the 1950s, the southern economic structure remained tied to unskilled, cheap labor and limited industrial development. Only in the wake of the Korean War and the massive military build-up of the intensified Cold War did the South begin to reap the real benefits of federal investment, when the influx of high-tech, diversified military appropriations supplanted the old economy. Lewis’s research provides important context for growth across the Sunbelt, and particularly in the Tennessee Valley, where uneven growth spurred the actions of civic groups concerned about the health of their regional economy. As Lewis suggests, the growth of the Sunbelt sometimes came “slowly, hesitantly, and painfully.”<sup>18</sup>

The Tennessee Valley Authority is an essential part of any analysis of southern development focused on the communities located along the Tennessee River. The Authority’s stated mission was to use government research and planning to physically and psychologically remake the southern economy, but as the agency’s leaders began implementing change, they realized that Valley residents had their own desires for community growth. The cooperation and conflict that marked the relationship between the Authority and locals exemplified the larger transformation in the southern economy; however, scholars have failed to explore this aspect of regional development. This is largely due to the paucity of critical scholarship on the New Deal

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<sup>17</sup> Robert Lewis, “World War II Manufacturing and the Postwar Southern Economy,” *Journal of Southern History* 73: 4 (November 2007): 854-56.

<sup>18</sup> *Ibid.*, 866.

agency. The tone of TVA historiography was set early, with a series of glowing accounts penned by Board members, none more exemplary than David E. Lilienthal's *TVA: Democracy on the March*. Published in 1944 while Lilienthal served as chairman of the agency, the work sought to demonstrate how the Authority combined government investment and personal initiative to "create new jobs, relieve human drudgery, give new life and fruitfulness to worn-out lands, put yokes upon the streams, and transmute the minerals of the earth and the plants of the field into machines of wizardry to spin out the stuff of a way of life new to this world."<sup>19</sup> Praising the agency's operations, Lilienthal used examples of "progress" to discourage real analysis into the Authority's impact, even as he worked with local leaders to reconfigure the government's plans for the region. The chairman's *TVA* and other similar works served to buttress the agency's image, publicizing the successes of its program in the Valley.

As TVA matured, outside scholars began to study the Authority's impact on all aspects of southern life. Monographs on regional planning, agricultural policy, administration, and major events in the agency's growth sought to more carefully qualify broader accounts of its program. Clarence Hodge, for example, studied the administration of the Authority's regional planning network by investigating the interaction between different federal, state, and local agencies in conjunction with the agency's work along the Tennessee River. Hodge concluded that "the Authority is likely to achieve democratically that which dictatorial methods would fail in attaining, namely active consent and participation in a program of regional reconstruction."<sup>20</sup>

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<sup>19</sup> David E. Lilienthal, *TVA: Democracy on the March* (New York: Harper & Brothers Publishers, 1944), 3. Other pertinent examples of self-referential histories of the Authority include Arthur E. Morgan's *The Making of the TVA* (Buffalo, NY: Prometheus Books, 1974); Marguerite Owen's *The Tennessee Valley Authority* (New York: Praeger Publishers, 1973); Gordon Clapp's *TVA: An Approach to the Development of a Region* (Chicago: University of Chicago Press, 1955); North Callahan's *TVA: Bridge Over Troubled Waters* (South Brunswick, NJ: A.S. Barnes, 1980); and Willson Whitman's *God's Valley: People and Power Along the Tennessee River* (New York: The Viking Press, 1939).

Other monographs fit the pattern set by Hodge, providing analysis that praises agency's work. Even scholarly accounts on TVA failed to examine critically the agency's program. Thomas McCraw's useful *TVA and the Power Fight, 1933-1939*, focuses on the battle between the Authority and private utilities in the Valley. The "power fight," combined with internal conflict on the Board, remade the agency in the late 1930s, yet McCraw hesitated to address the local support for TVA during the fight, a factor both in the continued popularity of the agency and in its resulting role as a force for economic development. Instead, he chose to portray the debate nationally as a conflict between public and private power "traditions."<sup>21</sup> Monographs such as Hodge's and McCraw's added important scholarship to the historical understanding of the agency, but failed to truly address TVA's shortcomings.<sup>22</sup>

Attempts to counteract this wave of positive publicity have been few, though a handful of scholars have shed light on the complicated nature of the Authority's work in the Valley. The first major critique came from Philip Selznick, whose *TVA and the Grass Roots* suggested that the agency's agricultural policy became co-opted by private interests, particularly the Farm Bureau, land grant colleges, and the Agricultural Extension Service. Claiming that a "grass roots" approach allowed the Authority to mirror more closely the needs of the people it served, the Board failed to prevent its program from coming under the undue influence of local authorities.<sup>23</sup> Selznick's work appeared in 1949, just as the Authority had begun to mature under

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<sup>20</sup> Clarence Hodge, *The Tennessee Valley Authority: A National Experiment in Regionalism* (New York: Russell & Russell, 1968), 243.

<sup>21</sup> Thomas K. McCraw, *TVA and the Power Fight, 1933-1939* (Philadelphia: J.P. Lippincott Company, 1971), 152.

<sup>22</sup> See also John R. Moore, ed., *The Economic Impact of TVA* (Knoxville: University of Tennessee Press, 1967); James E. Hibdon, "Flood Control Benefits and the Tennessee Valley Authority" in *Southern Economic Journal* 25:1 (1958): 48-63; Norman I. Wengert, *Valley of Tomorrow: The TVA and Agriculture* (Knoxville: University of Tennessee Press, 1952).

David Lilienthal's industrial development program, and focused largely on TVA's agricultural policies, but his conclusions have influenced others to assess the federal agency with a critical eye. Perhaps the most thorough critique of the Authority came from David Whisnant in his foundational study of Appalachian development, *Modernizing the Mountaineer*. Whisnant traced "a hundred years of exploitative private development in the mountains, and the condescending middle-class missionary attitudes and activities that accompanied it."<sup>24</sup> TVA exemplified invasive federal agencies which sought to modernize what they saw as a culturally and economically "backward" region. Building on Selznick's analysis, Whisnant argued that internal conflict between Board members worked to limit the Authority's ability to improve the lives of Valley residents. The agency narrowed its focus, cooperated too closely with privatized organizations and industries, and sacrificed environmental concerns (particularly in coal-producing regions). In the end, TVA's failures "reduced credibility as a model for future regional development efforts."<sup>25</sup>

Drawing on Selznick's criticism of the "grass roots" approach, other historians have produced specific analyses of TVA programs, particularly those policies that failed to care for the people the agency purported to help. Michael J. McDonald and John Muldowney criticized TVA's removal program, focusing on the small Tennessee communities displaced by Norris Dam and Reservoir. The scholars found that "TVA appeared to place its planning goals in the long term with little attention to short-term and intermediate impacts." The agency failed to

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<sup>23</sup> Philip Selznick, *TVA and the Grass Roots: A Study in the Sociology of Formal Organization* (Berkeley: University of California Press, 1949).

<sup>24</sup> David E. Whisnant, *Modernizing the Mountaineer: People, Power, and Planning in Appalachia*, rev. ed. (1980; repr., Knoxville: University of Tennessee Press, 1994), xv.

<sup>25</sup> *Ibid.*, 64.

compensate tenants or provide for an alternative to agriculture.<sup>26</sup> Nancy Grant investigated TVA's impact on the Valley's African American population. Touting a "grass-roots" approach to race relations, the agency refused to challenge segregated hiring practices, relying instead on quotas and proportional employment. As Grant concludes, despite constant action by black residents, the Authority did not improve the lives of a substantial minority within its borders.<sup>27</sup> Most accounts of TVA's work in the Valley tends towards the positive, but the critiques of Grant, McDonald and Muldowney, Whisnant, and Selznick provide an important counterpoint to the traditional narrative of the Authority's program of modernization. The Authority developed a complicated relationship with the people of the Tennessee Valley. As historians have noted, that cooperation brought both prosperity and economic and social dislocation. Yet in attributing the process solely to the federal agency, scholars have missed the way in which local leaders helped push TVA to adjust its strategies. In order to understand fully the consequences of modernization, historians must examine in detail the role of Valley residents in their own transformation.

The economic development of the Sunbelt South was the result of decades of cooperation and conflict as residents, civic leaders, state officials, and federal politicians determined the economic future of a rapidly changing region. Much of the impulse for change came not from above, but from within southern communities eager for prosperity. Farmers, failing to turn a profit on rented fields, looked to limited industrialization as a means of economic salvation. Local businessmen, hurt by falling profits and failing business, called for economic development as a means of community revitalization. Government funding was an important aspect of

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<sup>26</sup> Michael J. McDonald and John Muldowney, *TVA and the Dispossessed: The Resettlement of Population in the Norris Dam Area* (Knoxville: The University of Tennessee Press, 1982), 268.

<sup>27</sup> Nancy L. Grant, *TVA and Black Americans: Planning for the Status Quo* (Philadelphia: Temple University Press, 1990).

southern development, but not an impetus to change. Instead, federal investment provided the means by which locals created (or attempted to create) the prosperity they sought. In order to understand how an economically stagnant South entered the booming national economy, historians must see economic modernization as a dialogue in which southerners worked to attract and direct federal funds, even as government leaders struggled to retain control of the process. In the Tennessee Valley and across the South, development was a long and complicated process, and southerners deserve a share of the credit, as well as a share of the blame, that accompanied the emergence of the Sunbelt. In North Alabama, regional economic development began at Muscle Shoals, where the World War I defense effort spurred residents to look to the federal government for much needed investments. The fight over the resulting dam and nitrate plants was the first in a long struggle by Valley leaders to industrialize their dying agricultural economy

## CHAPTER 1

“A Living Monument to That Broad Principle of Democracy”: Muscle Shoals, 1916-1924

I'm going down to Muscle Shoals,  
times are better there, I'm told,  
cause I've got them big river blues.<sup>1</sup>

In early 1922, Alabama's League of Women Voters held a series of public debates across the state. The Birmingham event headlined two sharp political minds: Tuscaloosa Congressman W.B. Oliver and William Logan Martin, Jr., a former judge, an attorney for Alabama Power Company, and the younger brother of the utility's president, Thomas Martin. The men stood on opposite sides of an extremely contentious subject: the status of the stalled federal hydroelectric project at Muscle Shoals in northwestern Alabama. Martin's company had long been interested in the project, and had initially planned to build a hydroelectric power plant at the site on the Tennessee River before acceding to the demands of the national government, which was mobilizing for World War I and wanted to use the Muscle Shoals project to produce nitrates for the war effort. When the defense emergency ended, Martin and Alabama Power hoped to regain control of the project. Yet just as the utility prepared to resume operation, another bidder emerged. The year before Oliver and Martin's debate, automobile manufacturer Henry Ford submitted an offer for the Muscle Shoals development. Across the country, farmers flocked to Ford's camp, hoping that he would use nitrate manufacturing plants at the site of the dam to produce fertilizer. In the Birmingham debate, Oliver defended the interests of his agricultural

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<sup>1</sup> “I've Got the Big River Blues,” recorded by the Delmore Brothers, 1933.

constituents by praising Ford, even as Martin extolled the benefits of Alabama Power's offer for the project. From the outset, Oliver and Martin's discussion encompassed more than the future of Muscle Shoals. The government facility had become a symbol of the region's economic future, and in arguing their respective positions, the two men pictured a starkly different vision of the twentieth-century South.

Logan Martin took the podium first. The surge of support for Ford had resulted in a wave of negative publicity for Alabama Power, and Martin refuted attacks on the utility. He cited a number of impressive accomplishments: Alabama's electric rates dropped substantially in the past decade thanks to a growing power grid, and Martin's company was instrumental in developing a number of hydroelectric sites on the state's rivers. Martin stressed the local nature of his company, which had been founded in nearby Gadsden. He denied charges that Alabama Power, funded in part by British financiers, was "foreign" in nature.<sup>2</sup> The utility would direct its interest in statewide power development to the problem of Muscle Shoals, though the outcome would benefit the entire region. Martin spoke plainly: "If this Company takes [Muscle Shoals] it will bring to your doors and offer to the world an unlimited supply of power ... We will use this great resource for the people that they may enjoy what is theirs against monopoly." He argued that Ford would assume control of the facilities and parcel the output only to the surrounding farms and towns. Alabama Power would make "this great resource" available to the entire South.<sup>3</sup> With a promise to make cheap electricity available to communities across the region, Martin ceded the floor to Oliver.

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<sup>2</sup> "Addresses by Mr. Logan Martin and Hon. W.B. Oliver before the League of Women Voters, March 14, 1922," pp. 2-4, Folder 3.1.1.52.7, Alabama Power Corporate Archives, Birmingham.

<sup>3</sup> *Ibid.*, 21-2.

Like the entire Alabama congressional delegation, Oliver gave his support to Ford after realizing the widespread acclaim for the auto manufacturer by the state's farming interests. In his bid, Ford specifically promised to produce and distribute fertilizer at the Muscle Shoals plants. Thus, as the congressman began his statement, he portrayed Alabama Power as hostile to Ford's bid and, therefore, hostile to southern farmers. Oliver echoed many of the criticisms being leveled at the utility. He charged the company with monopolistic tendencies, pursuing the properties at Muscle Shoals in the hopes of consolidating its hold on electric power in Alabama: "[T]hey never had any other dream than to gobble up all the power sites of Alabama they could get." Alabama Power was owned by a "foreign syndicate" of British financiers whose ties to interests outside of the South and the United States would ensure that the prosperity produced by this state resource would leech from the area. Ford, however, sought to direct the power of the Tennessee River to the surrounding communities, the towns and fields of North Alabama feeling the pinch of a declining farm economy. Oliver argued that, via the hydroelectric dam and nitrate plants at Muscle Shoals, Alabamians could repay the "debt" the country owed to agriculture. Calling the plants "an opportunity for Alabama that may never come again," he spoke directly to farmers, promising that their "appeal shall not be heard in vain."<sup>4</sup>

For Oliver and the legions of Ford supporters, the automobile magnate's plans for Muscle Shoals meant a revitalization of southern agriculture through limited industrial investment. Cheap fertilizer, made from nitrates produced at the Muscle Shoals facility, would make it easier for the millions of farmers struggling to profit from continued cotton monoculture to remain in agriculture. True, Ford had built his reputation on the encouragement of industry, but in his plans for North Alabama, he promised to use manufacturing to buttress the regional

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<sup>4</sup> *Ibid.*, 12-6, 21-5. Oliver's address is paginated separately from Martin's, although both are bound in a single volume.

farm economy. Thus, those backing Ford hoped to encourage industrial investment for specifically pre-industrial development. In fact, Ford never publicly questioned the economic sustainability of farming. Instead, he appealed to agriculturalists hoping to remain in the fields, and his supporters saw manufacturing as a necessary, if limited, part of a revitalized regional economy. They believed that while some southerners might be forced to work in shifts and run machines, farmers would remain on increasingly productive and profitable farms. Ford's investment at Muscle Shoals would bring a kind of industrialization that would allow agriculture to persist in the South.

Martin and Alabama Power understood that fertilizer production was an important part of the Muscle Shoals project, but the utility was more concerned with the availability of hydroelectric power. The company spent millions creating a system of hydroelectric dams on state rivers, and with the Tennessee River added to the utility's power grid, Alabama Power could begin to extend the benefits of cheap power across the South. Some of that power would electrify homes and farms, but a substantial portion would go to industrial clients, looking to locate or expand in the region. As Alabama Power's actions demonstrated, cheap power production meant the transformation of the southern economy. As the utility worked to bring industry south, its leaders envisioned a diversified economy whose participants purchased power from the company's ample reserves.

Martin and Oliver disagreed over the fate of Muscle Shoals, but the two men shared one important assumption: the future of the southern economy required industrial investment. Where the congressman hoped Ford's industrial know-how would restore the South to its former status as a profitable center of agriculture, the utility's leaders saw regional industry drawing power from Muscle Shoals as the only viable path for southern progress. In the end, neither Ford nor

Alabama Power won control of Muscle Shoals. Yet the debate echoed through numerous efforts to modernize the southern economy. As Henry Ford and Alabama Power enunciated alternate futures for the Valley, they presented residents with the inescapability of change. Municipal leaders, particularly in the city of Florence, acted to build that new future, even as the plans for private ownership of the facilities withered. By the mid-1920s, Valley leaders began learning the ways and means of economic investment. Determined to create prosperity, they worked to diversify the economy and attract the money need to make that new way of life possible. The fight for Muscle Shoals was the first step in the economic transition from cotton belt to Sunbelt. The process by which local officials, private businessmen, and government leaders interacted to encourage development set important precedents for the contest and cooperation that would come to characterize economic growth in the modern South.

Few historians have chosen to tackle the political morass of the Muscle Shoals debate. The only detailed account of the fight over the development, Preston Hubbard's *Origins of the TVA*, will soon turn fifty years-old without a clear successor. This neglect is attributable to the lack of local sources and the overwhelming amount of congressional records. Muscle Shoals inspired a seemingly endless debate on the floor of the House and Senate, almost two decades of editorials in local and national papers, and numerous hearings and committee reports. Hubbard's work is essential in its detailed recounting of the attempts by various politicians to find a solution for the problem of the government's facilities in North Alabama. Hubbard's main interest is in following legislation from Ford's offer in 1921 to the creation of the TVA in 1933; however, in focusing on Washington, he fails to consider the ways in which the residents of the Valley

facilitated and directed development.<sup>5</sup> Regional proponents of private and public development, as well as supporters of the various bids for the facilities, saw the nitrate plants and hydroelectric dam as symbolic of the future of their economy, and the economy of the entire South. Thus, while events in Washington proved crucial to the final outcome of the fight, the local debate was just as important, and it must be included in any discussion of the Muscle Shoals question. As local leaders fought for the development of their communities, they created the foundations of a region-wide movement for economic progress that would stretch throughout the twentieth-century South.

Hubbard's history of Muscle Shoals shares one overriding characteristic with other works on the debate: a desire to account for the creation of the Tennessee Valley Authority. From the outset, Hubbard notes that his work will follow the "handiwork of a relatively small band of Progressives in Congress" who acted out of a desire to "uphold Progressive principles regarding public welfare which called for multiple-purpose development of the nation's water resources."<sup>6</sup> In particular, Hubbard follows Nebraska's George Norris, who fought throughout the late-1920s and early 1930s to create the TVA. In his analysis, Hubbard tends to look forward to Norris's victory for integrated waterpower and resource development, even as he tracks the various arguments through Congress. In *The Formative Period of TVA*, Adrian Daniel follows the efforts of promoters to convince the government of the need for regional development at Muscle Shoals from the "Tennessee River Frontier" in 1540 until the development's inception in 1916. Daniel provides an excellent overview of the plans to correct the navigational impediments of the river and utilize its resources. More than Hubbard, Daniel accepts the complex nature of

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<sup>5</sup> Preston J. Hubbard, *Origins of the TVA: The Muscle Shoals Controversy, 1920-1932* (New York: W.W. Norton and Company, Inc., 1961), vii.

<sup>6</sup> *Ibid.*, viii.

development in the Valley, following regional and national promoters, particularly Sheffield, Alabama's J.W. Worthington, as they pressed private and public enterprise to create economic growth in the Valley. Daniel also comes closer to including events in the Tri-Cities in the larger debate over the government plants and dam. However, by stopping in 1916, Daniel misses an opportunity to follow his argument into the 1920s, when the supporters of development, including Worthington, were at their most vehement and the ideas they enunciated were tested in public speeches, articles, and congressional legislation. For a historian seeking to show how promoters "molded the pattern" for future development, including TVA, the work falls short.<sup>7</sup>

The creation of a massive government agency to oversee the resources of an entire region was hardly the expected outcome of the debate over Muscle Shoals. In fact, for much of the fight, public ownership and organized utilization of the material wealth of the Tennessee River were ideas limited to that "relatively small" group of Progressive Republicans from outside the South. By ignoring the local debate, scholars have failed to see the long term consequences of the Muscle Shoals fight for the southern economy. As farmers and businessmen united in support for Ford, they came to accept the need for diversified economic development – both groups exhibited an understanding that some degree of industrialization had become a necessary part of continued prosperity. Granted, the unity that arose in the Valley in support of the Ford offer covered important differences. Where farmers hoped that limited industrialization would bring a return to agriculture, business leaders hoped that Ford would encourage an alternative to the cotton field. Ford's presence also worked to preclude cooperation between North Alabama's business community and Alabama Power, both of which accepted the importance of encouraging companies to relocate to the region. Mass support for Ford, encompassing a number of different

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<sup>7</sup> Adrian G. Daniel, *The Formative Period of TVA: The Muscle Shoals Project, 1783-1916* (New York: Carlton Press, Inc., 1973), 8.

views, simply demonstrates the impact the industrialist had on the Valley's economic future. Though his offer only lasted for three years, it mobilized North Alabama in unprecedented fashion. After Ford withdrew, Valley leaders continued to push for diversified economic development. By the 1930s and the 1940s, as the rest of the South came to accept industrial growth as an aspect of a modern economy, the people of the Valley had become seasoned developers, recruiting business, directing federal development, and adjusting to the dislocation that accompanied the rise of the Sunbelt South. Ford's offer may have failed in Washington, but the forces he unleashed in Alabama's Tennessee Valley reverberated in the modernization of the southern economy.

The shallow, rapid shoals on the Tennessee River near Florence, Alabama, challenged developers at the local, state, and federal level. Throughout the nineteenth century, Congress attempted to devise a plan to either dam the river, which would raise the water level enough to cover the navigation hazard, or to build a canal that would bypass the shoals completely. By the turn of the twentieth century, Muscle Shoals had again become an issue, with the entrance of the Muscle Shoals Hydro-Electric Power Company (MSHEPC) into the fight. Incorporated in 1906 by banker J.W. Worthington and Illinois civil engineer Frank Washburn, the MSHEPC purchased land around the shoals and planned to build a hydroelectric dam and nitrate facility at the site. The development would improve navigation, but also produce power and run the plant, making nitrates for fertilizer for the surrounding region. The group lobbied Alabama's congressional delegation, hoping to spur the legislators to action. In 1909, Worthington had MSHEPC Vice President Charles H. Baker prepare a memorial for the Alabama State Legislature to send to Congress. The memorial promised that if Congress would permit

MSHEPC to go ahead with development, then farmers would have new land to cultivate, they would easily transport goods to market, and “the hum of industry will be heard from one end of the Tennessee Valley to the other.”<sup>8</sup> In 1912, Worthington and Washburn’s company was bought out by James Mitchell, a financier who wanted to combine the MSHEPC with other Alabama development firms on the Coosa and Tallapoosa Rivers. As Alabama Traction Light and Power, the holding company that included the statewide utility, Alabama Power, Mitchell’s conglomerate envisioned a state-wide power system and found monetary backing from an English banking house to build the necessary infrastructure. Worthington was elevated to the vice presidency of the power group, and Washburn, long interested the production of nitrates in connection with hydroelectric dams, became president. The Tri-Cities joined Washburn and Worthington in calling for development. Florence Mayor C.W. Ashcraft and the Florence Commercial Club wrote to Alabama Senator John H. Bankhead, Sr., stressing Florence’s industrial possibilities (cotton mills, fertilizer plants, gins, and a developed wharf) and asking him to push for river development that would bring a navigable channel to the city.<sup>9</sup>

In 1912, Mitchell’s group announced plans to build its first dam on the Coosa River. Congress authorized construction, but President William Howard Taft, afraid that the government would not be reimbursed fully for the site, vetoed the bill. The veto frustrated Mitchell, Worthington, and Washburn, who realized that the federal government would be similarly unwilling to sponsor development at Muscle Shoals, which would be even more expensive than that planned for the Coosa. The company temporarily gave up on the sites at

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<sup>8</sup> Charles H. Baker to John H. Bankhead, Sr., 24 July 1909, 41:8, John H. Bankhead Sr. Papers, Alabama Department of Archives and History, Montgomery, Alabama (hereafter cited as ADAH).

<sup>9</sup> Ascraft to Bankhead, Sr., 3 January 1912, 42: 3, Bankhead, Sr., Papers, ADAH. See also Leah Rawls Atkins, *“Developed for the Service of Alabama”: The Centennial History of the Alabama Power Company, 1906-2006* (Birmingham: Alabama Power Company, 2006). Atkins provides much deeper insight into the formation of Alabama Power and the politics involved in the company’s early campaigns to build hydroelectric dams in Alabama.

Muscle Shoals, and Washburn, eager to put a nitrate plant into operation, built an American Cyanamid Company facility on the Niagara River in Canada instead.

By 1915, however, increasing demands for electricity convinced Alabama Power to look again at Muscle Shoals. This renewed interest was led by Worthington, who began using his resources at the utility to lobby extensively for a dam on the Tennessee. In fact, Worthington's zeal for the site became too much for Mitchell, who felt that the lobbyist was undercutting other planned developments. He forced Worthington to resign, though he was allowed to retain his lobbying position in Washington on behalf of Muscle Shoals. Washburn followed suit, leaving Alabama Power to concentrate on his nitrate work for American Cyanamid. By 1916, the possibilities inherent in the Muscle Shoals site undermined the solidarity of the utility's claims on the future project. Worthington, Washburn, and Mitchell each had specific designs for the river, and their inability to agree on its future weakened their position when faced with increasing national interest in Muscle Shoals.<sup>10</sup>

The Valley's congressional delegation actively supported plans to develop Muscle Shoals with public funds. Commenting on a 1914 House bill concerning the construction of dams on navigable rivers, Senator Oscar Underwood stressed the importance of preserving hydroelectric power as a service to the public. Calling for government oversight of projects like those proposed for Muscle Shoals, the senator asked Congress to keep dams free of charges or taxes as a means of keeping the price of water power as low as possible. Underwood explained that the people were "entitled" to cheap electricity for factories and homes and pointed to Mitchell's company as an example of the challenges inherent in allowing private concerns to develop sites. The utility's electric rate was high, even with dams on the Coosa River. The high rate prevented larger electro-chemical plants from locating in the area, specifically nitrate-fixing fertilizer

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<sup>10</sup> See Atkins, *"Developed for the Service of Alabama."*

manufacturers that could assist the region's farming population.<sup>11</sup> Less than a year later, Tennessee Representative J. Will Taylor made his views known in a House debate over funding a government survey of water power sites at Muscle Shoals. He argued that Washington should fund the development as a way to aid resource conservation and make the river useful while ensuring that the government could oversee the project and protect resources from abuse. In response to claims that it would give the power company a kind of water power monopoly, Tennessee Representative Richard Austin recounted the "splendid manufacturing cities" that would be built in the region and promised that "thousands" would be employed..<sup>12</sup>

By 1916, the century-long debate over what to do with Muscle Shoals had gained momentum, and while most groups could agree on the necessity for some kind of water power development, there were differences among the project's greatest proponents. Private utilities like Alabama Power saw definite possibilities in building a series of dams on state rivers, including the Tennessee, creating a statewide electric system that could power homes and farms and run factories. Others, like J.W. Worthington and Frank Washburn, focused intently on the possibilities at Muscle Shoals and its surrounding resources. Worthington led the drive for navigation and power development while Washburn envisioned a dam that would produce electricity to run nitrate plants, providing fertilizer for the region. Government leaders happily took up the charge as well, encouraging Congress to oversee the development to ensure that the benefits spread equally among the citizenry. When the coming war made the development a reality, the debate over the precise role of private companies and the federal government would become even more heated, with much larger implications for the economic development of North Alabama and the South.

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<sup>11</sup> Underwood, "The Water Power Bill," 18 July 1914, 46: 7, Oscar Underwood Papers, ADAH.

<sup>12</sup> *Congressional Record* (House), 63<sup>rd</sup> Cong., 3<sup>rd</sup> sess., 1915, 53, pt. 2: 1866-70.

On June 3, 1916, President Woodrow Wilson signed the National Defense Act, which gave him the power to investigate the production of nitrates by water power and to select a site for a dam that could be used to power a nitrate plant. When such a site was found, government would operate any plants built as a result of the act.<sup>13</sup> As the title suggested, the legislation was a wartime measure, designed to give the nation the means to produce additional munitions for the war raging in Europe. The United States imported most of its nitrates from Chile, and the possibility of being cut off from the main ingredient in munitions scared the Army and Navy. As the British blockaded Europe, Wilson came to appreciate the importance of domestic production, particularly the manufacture of weaponry and munitions needed for national security. As hostilities continued in Europe, Worthington and his congressional supporters saw an opportunity to promote the development of Muscle Shoals.

With the potential improvement of Muscle Shoals on the table, a group of Alabama and Tennessee businessmen published a comprehensive report, *America's Gibraltar, Muscle Shoals*, advertising the Tri-Cities as the perfect site for the government waterpower and nitrate facilities. *America's Gibraltar* perfectly encapsulates the vision that supporters had for Muscle Shoals. Calling itself the "Muscle Shoals Association," the group looked beyond national defense to the project's peacetime potential, suggesting that the same plant that built bombs could use nitrates to make cheap and abundant fertilizer for southern farmers. In fact, only one site in the entire

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<sup>13</sup> In the 1930s, the Tennessee Valley Authority's Legal Division, led by Judson King, produced two brief and informative summaries of the fight over Muscle Shoals. See Judson King, "A Brief Chronology of Muscle Shoals Legislation," 24 December 1933, 4: "010.12 Muscle Shoals Bibliography," David E. Lienthal Correspondence Files, Records of the Tennessee Valley Authority, National Archives, Southeast Region, Morrow, GA (hereafter cited as NARASE); and King, *The Legislative History of Muscle Shoals*, Vol. 1-4 (Knoxville: TVA, 1935), 1: "Legislative History of Muscle Shoals by Judson King, Vol. 1 and 2," and "Legislative History of Muscle Shoals by Judson King, Vol. 3 and 4," Arthur E. Morgan Papers, 1933-1958, Records of the Board of Directors (A.E. Morgan Papers), TVA Records, NARASE.

country would be “exceptionally suitable” for such a purpose: Muscle Shoals.<sup>14</sup> The brief listed the benefits that would accrue from a site on the Tennessee River. The development would free the country from its dependence on foreign-produced nitrates, and the site was conveniently located in the midst of the country’s neediest agricultural population. The development would also remove the navigation problem that had saddled the Tennessee Valley, effectively solving the Muscle Shoals question. First, however, the group had to prove that Muscle Shoals, more than any other location, possessed the qualities that the president had in mind when he signed the bill.

*America’s Gibraltar* provided a laundry list of the benefits that would come with the selection of Muscle Shoals, a list similar to much later calls for defense industry investment during World War II. The first consideration was safety. Munitions facilities would be prime targets for enemy combatants, but Muscle Shoals lay in the interior of the country, far enough from either the Atlantic or Gulf of Mexico to rule out an amphibian assault. Nitrate plants would need large amounts of energy, at least 200,000 horsepower at an affordable price. This was well within the expectations of the available power at Muscle Shoals, with a “practical capacity” of 600,000 horsepower and 280,000 available at a continuous rate. North Alabama was the only possible site situated within a resource-rich area of limestone, coke, and phosphate rock, the materials essential to the production of nitrates. Human resources were plentiful as well, with “cheap and reasonably dependent labor” willing to work for pay “as low as possible, consistent with fair living wages.” For a government concerned with the potential of espionage (and unionization), Muscle Shoals would ensure “a welcome freedom from the foreign element in all classes or population” that might “[have] no true conception of the spirit of our democratic

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<sup>14</sup> *America’s Gibraltar, Muscle Shoals*, Prepared by Nashville Section Engineering Association of the South, Published by the Muscle Shoals Association, Nashville, TN, 1916, p. 7, Hoole Special Collections Library, Tuscaloosa, AL (hereafter cited as Hoole).

institutions” or “the inspiration of American patriotism.”<sup>15</sup> When the war ended and the plants shifted to fertilizer production, the authors argued, the site would again prove valuable. Muscle Shoals lay in the center of the South’s agricultural district, which consumed more fertilizer than any other section of the country. In “the heart of rural America,” Muscle Shoals would allow for cheap and quick distribution of fertilizer to those who needed it most.<sup>16</sup> In choosing North Alabama as the site for the operation, the government would, in effect, make Muscle Shoals “the source of an economic influence that shall be felt from coast to coast, lightening in a measure the burdens of the people, bringing the greatest good to the greatest number, and making this enterprise a living monument to that broad principle of democracy.”<sup>17</sup>

The Tennessee River was not the only potential site for the nitrate plants – it was not even the only site in Alabama. In early 1917, Secretary of War Newton Baker assembled a commission to look into potential sites and toured the country making inspections. Besides Muscle Shoals, which Baker visited with Senator John Bankhead and Tri-Cities Representative Edward B. Almon, the secretary also toured a site on the Black Warrior River at Tuscaloosa.<sup>18</sup> This posed a problem for Bankhead, whose home district lay along the Warrior and included the city of Tuscaloosa. Bankhead tried to remain neutral. He wrote to H.A. Von Schon, an engineer who once reported on water power at both Muscle Shoals and Warrior, hoping he would look over the information on the potential sites. He stressed his desire for impartiality, and told Von Schon that his overriding concern was finding a site that would provide the cheapest power for

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<sup>15</sup> *Ibid.*, 42, 45, 49-50.

<sup>16</sup> *Ibid.*, 48.

<sup>17</sup> *Ibid.*, 60.

<sup>18</sup> “The Nitrate Board Visits the Shoals,” *Florence Times*, 16 March 1917, 1.

fertilizer and might be best improved by the navigational benefits from the accompanying dam.<sup>19</sup> In the meantime, Bankhead faced increasing public pressure to work for the Warrior site. He received a flood of telegrams, including some from prominent businessmen anxious for the improvements that would accompany the project. Charles F. Debardeleben, president of the Birmingham Chamber of Commerce, asked the senator to have the facility located at Warrior. Bankhead remained circumspect, warning Debardeleben that the Warrior site was one of twelve possible sites possible, and that construction might halt navigation on the Black Warrior for several years, a direct threat to Debardeleben's iron and steel shipments. He reminded his constituent that due to the national nature of the project, he would have to choose a site best for all concerned, and Bankhead promised to work for whichever site was chosen.<sup>20</sup>

Senator Oscar Underwood was not as impartial. In a July 22 letter to the *Birmingham Age-Herald*, Underwood argued for the Muscle Shoals site over the Black Warrior River location. While the engineering report on the Warrior was favorable, the river had seen three dry years, severely hampering its power generating capabilities should the trend continue. Underwood also echoed Bankhead's fear that construction would close the river for several years and noted that Muscle Shoals would have more available horsepower. However, Underwood's prime concern lay with North Alabama's farming population. Besides the necessity for national defense, the nitrate plant would be a prime manufacturer of fertilizer, and Muscle Shoals lay closer to the resources needed for production. The Tennessee River site meant cheaper fertilizer.<sup>21</sup>

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<sup>19</sup> Bankhead to Von Schon, 11 June 1917, 23:2, Bankhead, Sr. Papers, ADAH.

<sup>20</sup> Debardeleben to Bankhead, 12 July 1917; and Bankhead to Debardeleben, 13 July 1917, 23:3, Bankhead, Sr. Papers, ADAH.

<sup>21</sup> Clipping from *Congressional Record* (Senate), 65<sup>th</sup> Cong., 1<sup>st</sup> sess., 25 July 1917, pp. 5989-92, "Muscle Shoals Scrapbook" [ca. 1923-4], 20: "Muscle Shoals Scrapbook," Underwood Papers, ADAH.

For the citizens of the Muscle Shoals District, an official decision was little more than a formality. Even before the National Defense Act was signed into law, Florence got a taste of the future. The city saw a sudden burst in real estate activity, centered largely on “speculative propositions owing to the apparently excellent chances of securing the development.” Frontage on the downtown streets sold quickly to businessmen looking to set up shop by the time construction began.<sup>22</sup> Mass meetings were held to encourage land owners to offer acreage at the potential sites for reasonable rates. Two men promised to sell their land at face value and one woman offered to donate to the government any of her land covered by water backed up behind the dam. Local officials planned to publish a list of those willing to sell land at a fair price. Subscriptions poured in to the chamber of commerce and city leaders paid government experts to attest to the benefits that would come from cheaper fertilizer produced at Muscle Shoals.<sup>23</sup>

Government plants were only the tip of the iceberg. Local leaders moved to take control of the situation, hoping to use the development as a springboard to further growth. In August 1916, President R.T. Simpson of the Florence Commercial Club planned a meeting to mobilize the citizenry. In an article announcing the assembly, Simpson listed the vast resources available at Muscle Shoals and promised that his city would “awake from her Rip Van Winkle sleep” and “spring into the rank of metropolitan cities.” For Simpson and many of his fellow citizens, the federal project would begin a new era of economic development. As long as the population of Florence and its surroundings worked to promote their city and region, they would hear “the song of machinery, the busy hum of industry.”<sup>24</sup> The city’s chamber of commerce soon moved

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<sup>22</sup> “Real Estate Very Active,” *Florence Times*, 24 March 1916, 1, 4.

<sup>23</sup> “Muscle Shoals Meeting Held,” *Florence Times*, 21 January 1916, 1, 8; “Enthusiastic Meeting,” *Florence Times*, 10 March 1916, 1.

<sup>24</sup> R.T. Simpson, “Big Muscle Shoals Meeting Friday Night at Court House,” *Florence Times*, 4 August 1916, 1.

into a new space that provided more display room for the city's resources and manufactured products. The group began contacting companies interested in relocating to the Tri-Cities area, including a furniture manufacturer and a limestone processor.<sup>25</sup> With Congress on the verge of choosing the site at Muscle Shoals, some of the region's citizens envisioned a larger development, sparked by a federal hydroelectric dam and nitrate plant. Florence's civic leaders looked to use the incoming payrolls and positive press to incite an even larger influx of business.

On October 1, Bankhead and Underwood informed Worthington that as long as the site could be obtained for reasonable prices, a hydroelectric dam and nitrate plant would be located at Muscle Shoals (a second plant soon followed). Four days later, the *Florence Times* announced the good news. From the outset, Bankhead realized that the selection of Muscle Shoals had larger implications.<sup>26</sup> Local leaders also saw the nitrate plants as the tip of a much larger plan of regional revitalization. The facilities promised to bring in thousands of construction workers and retain many to operate the production lines, and residents hoped the dam would produce enough power to run the nitrate plants, fuel factories, homes, and farms. As the Tennessee River became navigable, planners believed that the channel would open the Valley to goods from the North and West at much cheaper rates. Yet most importantly, the end of the war in Europe would allow the transition from munitions to fertilizer. For most Valley residents, the promise of cheap, abundant fertilizer made the choice of Muscle Shoals a victory for North Alabama.

By the end of World War I, the boom years for cotton production in the South were coming to a close. For white farmers, the "agricultural ladder" became temporarily easier to climb as increased income reduced the threat of foreclosure; between 1910 and 1920, the number of farm laborers dropped across the South. For black farmers, however, land ownership slowed

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<sup>25</sup> "Will Soon Have Fine Quarters," *Florence Times*, 16 March 1917, 1.

<sup>26</sup> Bankhead to Harris, 29 October 1917, 24:1, Bankhead, Sr. Papers, ADAH.

during the same period. As incomes rose, so did land prices, keeping real estate just out of the reach of the African American agricultural population.<sup>27</sup> Real wages for all southern farmers declined across the postwar decade, even as northern factories saw a relative increase.<sup>28</sup> The agricultural depression that began in the early 1920s drove many to “make do” at home, placing heavy burdens on farm women forced to meet family needs with home production. Some joined their husbands, fathers, and brothers in looking for part-time jobs to buttress declining incomes, a task made increasingly difficult by the declining number of jobs in southern industries as the decade continued.<sup>29</sup> As Charles Aiken notes in his study of cotton agriculture since the Civil War, the 1920s marked the beginning of the decline of the cotton plantation, a process that would escalate with the New Deal. As owners relaxed management, tenants and sharecroppers left for jobs in factories, leaving hired annual laborers to harvest crops.<sup>30</sup> In Muscle Shoals, much of the demand for industrial growth came from city leaders concerned about employing out of work farmers.

Faced with declining agricultural prosperity, farmers and non-farmers alike looked to the government facilities at Muscle Shoals for economic salvation. The Muscle Shoals development came at a time of particular crisis for Alabama’s farming community. In 1939, the TVA’s Social and Economic Research Division released a survey of land tenure in the Valley. The report drew from decades of study into the causes and effects of agricultural depression in the counties along

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<sup>27</sup> Gavin Wright, *Old South, New South: Revolutions in the Southern Economy since the Civil War* (Baton Rouge: Louisiana State University Press, 1986), 119-20.

<sup>28</sup> *Ibid.*, 202-3.

<sup>29</sup> In particular, see Melissa Walker, *All We Knew Was to Farm: Rural Women in the Upcountry South, 1919-1941* (Baltimore, MD: Johns Hopkins University Press, 2000). While Walker’s study focuses on the upcountry of eastern Tennessee, southwestern West Virginia, and northwestern South Carolina, her portrayal of farm families is largely applicable to North Alabama as well.

<sup>30</sup> Charles S. Aiken, *The Cotton Plantation South since the Civil War* (Baltimore: Johns Hopkins University Press, 1998).

the Tennessee River. Tracing the history of tenancy back to the plantation economy and the Civil War, the agency's research staff described a spiral of dependency based on declining self-sufficiency, increasing costs for fertilizer and feed, and a growing reliance on cash cropping.<sup>31</sup> Valley farmers focused their efforts on corn and cotton – crops depleted the soil and, as a result, forced farmers to use more fertilizer to maintain productivity. When cotton prices fell, farmers could no longer pay for the minerals that kept their cropland profitable or the mortgages that kept them solvent. From 1880 to 1930, the population of the Valley grew by 2/3, the number of farms doubled, but the number of tenants and sharecroppers tripled. In the 1920s alone, 12,500 farmers entered tenancy, though the region gained only 6,300 new farms. More and more southerners found themselves falling into dependency as they struggled to break even. As the report noted, “The precipice becomes steeper and steeper so that ascent is increasingly difficult.”<sup>32</sup> The Valley met the definition of a region in crisis. Only four of every thousand inhabitants filed income tax returns, and very few had radios or telephones. As tenants sought to improve their status, they moved about the region, squatting and farming wherever conditions suited. The overreliance on cotton and corn meant that farmers seldom grew food crops or kept livestock to supplement their poor diet.<sup>33</sup> Looking for a solution to the crisis in agriculture, Alabamians turned to the possibilities inherent in fertilizer production at Muscle Shoals.

Months before the announcement, the farmers and businessmen of the Muscle Shoals region anticipated the benefits such a development would bring to agriculture. In a *Florence Times* editorial, “X.Y.Z.” compared the booming prewar German agricultural economy with that

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<sup>31</sup> Jasper B. Shannon, Social and Economic Research Division, Department of Regional Planning Studies, TVA, “Tenancy in the Big Bend of the Tennessee River: A Summary,” 1 June 1939, 286: Loose, [Harry] Curtis, [Arthur E.] Morgan, and [Harcourt A.] Morgan, Records of the Board of Directors, Office of the General Manager (hereafter cited as Curtis-Morgan-Morgan Papers), TVA Records, NARASE.

<sup>32</sup> *Ibid.*, 43-6.

<sup>33</sup> *Ibid.*, 52-6, 60-1.

of the United States. If the farmers of the Valley used even half as much fertilizer as their German counterparts, they would reap benefits “beyond the dreams of even the visionary” with year-round crops that prevented the need for borrowing on future harvests.<sup>34</sup> Tuscaloosa farmer Thomas H. Maxwell introduced a resolution at the State Farmer’s Union convention to “give us nitrates quickly, no matter where the plant for its manufacture should be located.” Bankhead praised Maxwell’s spirit: “The farmers need the relief ... something should be done for the men whose labor must feed and clothe the nation.”<sup>35</sup> Another farmer advised Bankhead to make a public statement about reducing the price of fertilizers. Having recently learned that Muscle Shoals won the development, Bankhead replied optimistically that when the plant was finished, southern farmers would have all the nitrates they needed at half the current price.<sup>36</sup>

The possibilities for the plants at Muscle Shoals seemed to encompass a broad scope of economic improvements, but as both the campaign to locate the plants and the ultimate decision made clear, the center of Muscle Shoals’ winning case was its potential benefit to agriculture. The nitrate plants would provide domestically produced nitrates that could be easily transitioned from wartime munitions to fertilizer, and then quickly shipped to the surrounding countryside. Bankhead and Underwood realized the importance of fertilizer to their rural constituency and the people of the Valley praised them for their work to aid the region’s farmers. Thus, in its earliest manifestations, the impetus behind economic development, at least in North Alabama, began as a way to benefit the farming community. This notion became exceedingly important in the years that followed the initial euphoria in Muscle Shoals. Thomas Heflin later made this fact clear,

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<sup>34</sup> “X.Y.Z.,” “The Government Nitrate in another Aspect,” *Florence Times*, 9 February 1917, 7.

<sup>35</sup> Maxwell to Bankhead, 1 August 1917, Bankhead, Sr. Papers, ADAH.

<sup>36</sup> A.M. Tunstall to Bankhead, 1 October 1917; and Bankhead to Tunstall, 4 October 1917, Bankhead, Sr. Papers, ADAH.

calling for legislation for development at Muscle Shoals to “supply the farmers with cheaper fertilizer,” “increase the productivity of the soil,” and “deliver the farmers from the clutches of the fertilizer trust, and free the Government from dependence upon Chile for nitrates.”<sup>37</sup> For Heflin, as well as the rest of Alabama’s delegation and the people of the Muscle Shoals region, the nitrate project was a form of federal assistance to struggling farmers. As federal funding for the development ebbed, the people of North Alabama were forced to reconsider their vision for Muscle Shoals, particularly the notion that the best use of the development at Muscle Shoals would somehow involve retaining an agricultural lifestyle.

Farmers across the South claimed Muscle Shoals as a victory for agriculture, and many attributed the coming prosperity to the federal government’s willingness to adjudicate the use and distribution of natural resources. The National Defense Act of 1916 ensured that the federal government would fund the improvements on the Tennessee River at Muscle Shoals and operate the plants. The legislation called for the construction of nitrate plants and a dam with federal appropriations, and the act promised that, when operated, the facilities would provide needed improvements to the Shoals area. Early in the construction process, many saw public ownership and operation as the best way to ensure that the Muscle Shoals project benefitted agriculture. As the government wrangled over further appropriations for the dam, utility and fertilizer companies seemed the largest roadblock. Quoting the *Mobile Register*, the *Florence Times* argued that the biggest obstacle to the speedy completion of the dam was the “influence” of the gunpowder, fertilizer, and hydroelectric industries, all of whom faced serious competition from government production of nitrates at the facilities.<sup>38</sup> Speaking in the Senate, Oscar Underwood enunciated his own fears of the consequences of private operation. While admitting that under normal

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<sup>37</sup> *Congressional Record* (Senate), 66<sup>th</sup> Cong., 3<sup>rd</sup> sess., 1921, 60, pt. 2: 1213.

<sup>38</sup> “The Trusts Fighting the Dam,” *Florence Times*, 31 December 1920, 2.

circumstances, he would not support the government entering the private sector, Underwood favored government construction of the dam, since the power created there would be used for the benefit of the public.<sup>39</sup> In fact, besides making munitions for national defense, Underwood believed that any surplus power should be used to “benefit the agricultural classes of the country.”<sup>40</sup> He denied that either the American Cyanamid Company, which provided technical expertise for the construction of one of the plants, or Alabama Power would derive any benefit from the government project, believing that both companies (which would later propose leases of the facilities) were financially uninterested in the capabilities of the project. In particular, Underwood stressed that Alabama Power was overly concerned with its developments along the Coosa River, and was focused on “lighting towns and running street cars” instead of powering nitrate plants.<sup>41</sup>

Alabama Power took the decision by the federal government to direct the development of the Shoals as an ironic defeat. J.W. Worthington, the company’s former vice president, had done much to get Congress to act on behalf of development at Muscle Shoals, and the government had responded by taking the property away from the utility. Washburn, at one time the company’s president, was now at American Cyanamid, encouraging the government to use some of its patents to manufacture nitrates at the planned facilities. Even worse, in choosing to locate the facility at Muscle Shoals, the government demanded the exact site the utility had acquired with MSHEPC in 1912. Threatened with the possibility of a seizure by eminent domain, Alabama

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<sup>39</sup> According to Underwood’s biographer, Evans Johnson, the senator was a “typical” southern Bourbon favoring the promotion of New South business through “generous” government concessions. Johnson argues that Underwood initially supported a more active governmental role at Muscle Shoals because of the national defense and fertilizer implications of the site. See Johnson, *Oscar W. Underwood: A Political Biography* (Tuscaloosa: The University of Alabama Press, 2006), 452, 348-9.

<sup>40</sup> *Congressional Record* (Senate), 66<sup>th</sup> Cong., 3<sup>rd</sup> sess., 1921, 60, pt. 2: 1138- 9.

<sup>41</sup> *Ibid.*, 1138.

Power “donated” the land to the government for one dollar in exchange for the government’s assurance that it would consider Alabama Power for the surplus power created at the dam. In the spirit of national defense, the private utility turned over its plans and blueprints for the dam, effectively giving the government both the site and the means for development. The company also agreed to take responsibility for maintaining the transmission lines at the plant, and even constructed extra generators at the existing Gorgas Steam Plant on the Black Warrior River, running lines to Muscle Shoals to help with construction needs. Yet in the end, Alabama Power’s hard work to develop Muscle Shoals seemed wasted. To make matters worse, in a 1921 article, the company printed a copy of the one-dollar check it had received for its land at Muscle Shoals, and the government responded by fining the company \$500 for printing the uncashed check.<sup>42</sup> In a matter of months, the company had lost one of its major water power developments and was increasingly becoming a pariah among its congressional supporters. When his son told him that he had accepted a retainer to serve as attorney for the company, John Bankhead, Sr., let him know his true feelings: “They are arbitrary and dictatorial in their demands and are raising a howl everywhere they go.” He told John, Jr., that an official connection to the company would be a “mistake.”<sup>43</sup> The company’s declining position at home and in Washington created a negative image that would threaten its future claims on the Muscle Shoals properties.

In October 16, 1917, construction started on the nitrate plants and the government began preparations for the hydroelectric dam. Senators Bankhead and Underwood traveled to the Tri-Cities to mobilize public opinion, facilitating the acquisition of land and preventing rampant property speculation. In public speeches, the senators promised the citizenry that if land owners sold at “a fair, reasonable and honest price,” then the development would come quickly. The

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<sup>42</sup> Leah Rawls Atkins, “*Developed for the Service of Alabama*,” 84-5.

<sup>43</sup> Bankhead, Sr., to John H. Bankhead, Jr., 20 July 1916, 22:5, Bankhead, Sr., Papers, ADAH.

*Florence Times* couched the decision in no uncertain terms: “[T]his, the greatest government project in America, was ours for the accepting on terms, that no man, unless he were an enemy to the government or a slacker, could refuse.”<sup>44</sup> The campaign went well, despite the fact that the planned government facilities caused property values to rise. Land committees sprang up in the area to organize the transfer, and by February, they reported to Bankhead and Underwood that they had secured almost 98% of the 8,895 acres needed for the project at an average of \$43 per acre. Some of the land was donated to the government and many options were offered for “very low prices,” hoping that the project would end the fight over developing the Shoals.<sup>45</sup>

In retrospect, the land acquisition campaign went more smoothly than later campaigns by the TVA. Bankhead, Underwood, and local leaders convinced the citizenry of the importance of selling their land to the government, making appeals to patriotism and civic-mindedness in ways that would later prove more difficult. Even those hesitant to sell felt the need to explain their actions. James T. Kirk of Tuscumbia believed that his land was worth about \$100 per acre as good, productive cotton land, and others interested in his property agreed that his estimation was correct. The government, however, offered \$65 per acre. Kirk was upset about the price, but as he told Bankhead, “I want to do my part in this matter, and will do it as I see it.”<sup>46</sup> If refusing to sell his land to the government meant being unpatriotic, then Kirk was faced with a difficult decision.

The situation was made more difficult by the considerable authority the federal government could use in the event that a landowner refused to sell. In the Senate, Underwood

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<sup>44</sup> “Great Muscle Shoals Meeting in Florence,” *Florence Times*, 16 November 1917, 1.

<sup>45</sup> N.C. Elting, Chairman, Lauderdale County Land Committee, and J.L. Andrews, Chairman, Colbert and Lawrence County Land Committee, to Bankhead, Sr., and Underwood, 1 February 1918, 43:4, Bankhead, Sr. Papers, ADAH.

<sup>46</sup> Kirk to Bankhead, Sr., 15 December 1917, 24:2, Bankhead, Sr. Papers, ADAH.

supported legislation that would expand the powers of the War Department to condemn land for the plants. His bill broadened older legislation in order to specifically include the nitrate plants, hoping to encourage “obdurate” landowners in some of the outlying tracts to go ahead and sell for more reasonable prices. In the House, Representative Edward Almon linked land acquisition to the war effort: “I do not suppose there is a Member of this House who would not regret to hear of our boys in France retreating with empty guns for want of ammunition.”<sup>47</sup> Landowners faced real pressure to sell their property to the government. Land meant wealth in an agricultural economy, and the bottom land along the Tennessee River was especially productive. In asking the farmers of Muscle Shoals to turn over their farms to the government, Bankhead, Underwood, and Almon promised that the end result, an operating munitions and fertilizer production plant, would be worth the sacrifice.

Florence continued to look beyond the agricultural nature of the plants to the promise of further development, especially as the city prepared to accommodate the thousands of workers expected in the city. In a region with few alternatives to farming, the government plants provided a real opportunity for those in Muscle Shoals and across the South who could no longer make a living in agriculture. People flooded into the Tri-Cities looking for work and, while many found employment in the construction force of almost 20,000 working on the plants and the dam, others added to the growing population of the unemployed that taxed the city’s infrastructure.<sup>48</sup> The chamber of commerce divided its time between consulting with interested companies and finding housing for the expanding population.<sup>49</sup> As construction picked up, the

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<sup>47</sup> *Congressional Record* (Senate), 65<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1918, 56, pt. 4: 3178; *Congressional Record* (House), 65<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1918, 56, pt. 5: 1280.

<sup>48</sup> “Muscle Shoals Chemical Plants,” *Wall Street Journal*, 15 May 1918, 10.

<sup>49</sup> “Development in Fine Progress,” *Florence Times*, 7 December 1917, 1.

situation worsened. In one week in early 1918, 100 people arrived from Indiana, and other arrivals from Illinois, Wisconsin, Minnesota, Ohio, and New England placed additional stress on regional services.<sup>50</sup> By April, finding a home had become almost impossible, with many families in the area around the construction site already boarding out-of-town workers. The government worked to encourage home building through low interest loans. Florence began building 200 houses scattered throughout the town so that workers would assimilate into the community. Despite the housing crisis, Florence's leadership saw an opportunity to "build a city" around the hopefully permanent plants.<sup>51</sup> Perhaps even more importantly, North Alabama's citizenry realized that federal funds and attention created jobs. As the government poured money into the plants and the dam, thousands of southerners (residents and recent migrants) reaped the benefits with wages that returned money to the community. Admittedly, towns scrambled to accommodate the booming workforce in the hope that their struggles would be rewarded with increased retail sales, additional tax revenue, and the promise of further industrial development and agricultural prosperity.

Even with this assistance, the situation worsened as the project continued to take shape. Citizens did their part, donating more land to the government for homes, as well as a city park. These latter donations were especially important, since real estate prices rose dramatically as work began.<sup>52</sup> By June 1919, 1,100 men were at work on the dam, and officials planned to increase employment even further as soon as housing became available. The city also began to meet other needs, with recreational facilities for white and black workers, baseball fields, a post

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<sup>50</sup> "Florence Growing by Leaps and Bounds," 18 January 1918, *Florence Times*, 1.

<sup>51</sup> "No Room for Dam 2 Forces," 12 April 1918, *Florence Times*, 1; "U.S. Government Will Finance Florence Home Building," *Florence Times*, 26 April 1918, 1.

<sup>52</sup> Sheffield Chamber of Commerce to Bankhead, Sr., 10 November 1918, 26:1, Bankhead, Sr. Papers, ADAH.

office, and expanded city services.<sup>53</sup> By September, the total workforce reached 2,100, skilled and unskilled employees, and officials promised that they would soon need an additional 1,900 workers in the area. Work camps opened alongside the work sites, and workers were even housed inside the buildings at the nitrate plants.<sup>54</sup> Some of the camps began developing their own sense of community. The *Florence Times* began printing a special edition targeted specifically towards workers on the projects. The “Muscle Shoals Section” ran articles on the day nursery at the dam and the Wilson Dam School, evidence of the growing population on the nitrate reservation.<sup>55</sup>

The construction projects and the nitrate plants provided novel employment opportunities for the African American community. The Air Nitrates Company, a subsidiary of American Cyanamid operating under a government contract to construct one of the nitrate plants, advertised the possibilities to local black farmers in area newspapers. The plant provided “one of the most wonderful opportunities ever offered to the workingmen of the negro race.”<sup>56</sup> Recruits enjoyed ample pay, entertainment (including a “negro orchestra”), and access to schools and medical care for their families. A political cartoon entitled “Uncle Sam’s Call to the Negro” portrayed Uncle Sam telling a black laborer to “do your bit” at the Muscle Shoals facility.<sup>57</sup> The ad quoted several black community leaders extolling the opportunity. One praised the plant’s managers as helping demonstrate that “the Negro has within him the very best qualities that go to

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<sup>53</sup> “Four Hundred Men at Work Building Quarters for Increased Force at Dam 2,” 6 June 1919, *Florence Times*, 1.

<sup>54</sup> “2,000 Men Are Now Employed on World’s Greatest Dam; Force May Reach 4,000,” 19 September 1919, *Florence Times*, 1.

<sup>55</sup> “Exceptional Record of Wilson Dam School,” and “The Wilson Dam Day Nursery,” 21 May 1920, *Florence Times, Muscle Shoals Section*, 1.

<sup>56</sup> “Government Cyanamid Plant at Muscle Shoals Affords Negro Labor Wonderful Opportunities,” *The Muscle Shoals Cyanamid News*, 1:1 [1918], 1. The insert can be found in the bound collection of the *Florence Times*, 1918, ADAH.

<sup>57</sup> *Ibid.*, and “Uncle Sam’s Call to the Negro,” *Ibid.*

make up the highest type of manhood.” Another called the plant “the best chance for advancement, in every way, that the American negro has ever had.”<sup>58</sup> Economic opportunity meant an opportunity for laborers to improve their condition with a new source of personal income. The construction manager, Robert Oliver of Knoxville, was portrayed as a kindly manager who “has devoted a great deal of his time and attention to the comfort and well-being of the negro workers at the plant and their families.” Paternalism towards the black community pervaded the entire insert. In extolling the segregated recreation, education, and living facilities, the company implicitly compared the “wholesome” and “healthy” life at the plant with alternatives on the farm or in town. Another cartoon, “Oh Boy! Ain’t It a Grand and Glorious Feeling,” told the story of a black worker who realized fortune and happiness at Muscle Shoals.<sup>59</sup> In hindsight, the company’s motives are painfully clear. Declining farm prices hit the African American tenant farming community especially hard, and while some took the opportunity to migrate to northern and southern urban areas for labor, others looked for jobs closer to home. Willing to work for less and with fewer alternatives than their white counterparts, black laborers could provide the much needed labor at a fraction of the cost.

As historian Victoria Ott notes, the plants provided a real economic alternative for Muscle Shoals’s African American population, even if their pay and benefits paled in comparison with those for whites in other occupations.<sup>60</sup> Yet expanding employment opportunities did not translate into a better life in the Jim Crow South. As the advertisement

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<sup>58</sup> “Government Cyanamid Plant at Muscle Shoals Affords Negro Labor Wonderful Opportunities,” 1; and “Large Theater at Cyanamid Plant for Negro Employes,” 1, 2, *Ibid.*

<sup>59</sup> “Robert Oliver Popular Figure at Gov’t Plant,” and “Oh Boy! Ain’t It a Grand and Glorious Feeling,” 4, *Ibid.*

<sup>60</sup> Ott, “From the Cotton Fields to the Great Waterway: African Americans and the Muscle Shoals Project during World War I,” in *Southern Historian* XXII (Spring 2001) 35-54. Ott’s research has since been republished in *The Great War in the Heart of Dixie: Alabama during World War I*, edited by Martin T. Olliff (Tuscaloosa: The University of Alabama Press, 2008): 101-20.

clearly suggested, black laborers faced segregation both at work and at home as the companies constructing the plants enforced southern racial legislation. As Ott reveals, the promises of better living conditions were never fully realized. Tri-City black workers faced the racism of fellow white workers, brutality from plant security forces, and wartime “work-or-fight” laws that led many to look to national organizations for assistance.<sup>61</sup> Even as the Muscle Shoals project opened the door to better jobs and higher wages, it prevented real advancement and furthered the social inequalities that precluded tangible improvements in the lives of black southerners.

The employment boom convinced many that the Tennessee Valley was on the verge of an economic revolution. More than any other city, Florence attempted to harness the economic power of the government projects. The 1920 municipal election campaign revolved around civic progress. The *Florence Times* supported a “progressive” ticket, aiming to build a “bigger, better Florence.” The opposition, termed “reactionary” by the paper, found a following in the large property holders who feared the city’s rapid growth and industrial jobs, which might allow farm laborers to leave agriculture. The *Times* warned that a “reactionary” victory would result in a “civic disaster” that would mean a “hopeless future.” The success of the “progressive” candidates signified Florence’s new mindset.<sup>62</sup> The housing crisis and the election provide insight into Florence’s response to the government projects. While Bankhead, Underwood, Almon, and the farmers of the Muscle Shoals District expected the plants to bring cheap, abundant fertilizer, Florence’s leaders looked beyond the direct benefits of the nitrate plants. The city saw instead the new workers, the payrolls, the civic improvements, and the national attention. Even before the first brick was laid, Florence began promoting itself as an economic

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<sup>61</sup> In particular, black workers looked to the NAACP and the Urban League in attempts to correct discrimination on wartime projects. See Ott, “Cotton Fields,” 49-52.

<sup>62</sup> “The Development of Florence Lies with Her Voters”; and “Will the People Be Deceived?” *Florence Times*, 17 September 1920, 1, 2.

powerhouse, expanding its chamber of commerce, increasing city services to meet rising demand, and pushing for a proactive city government that would work to take advantage of the opportunity.

By 1920, as construction continued on the hydroelectric dam, Alabama's congressional delegation found continued appropriations difficult to obtain. Until then, supporters of Muscle Shoals assumed that the main goal of the nitrate plants and accompanying hydroelectric dam was to produce munitions for national defense in times of war and fertilizers for farmers in times of peace. The dam would produce hydroelectric energy to run the fertilizer plants (there was little initial discussion over surplus hydroelectric power this early in the development). Finally, early proponents of the project supported government operation of the plants. Even in late 1920 and early 1921, both the Alabama delegation and national farm organizations like the American Farm Bureau Federation supported bills that provided for government operation of the plants.<sup>63</sup>

Soon, supporters of the plants began facing serious opposition from a resurgent Republican Party. The platform of the 1920 Democratic Convention sought to defend the \$70,000,000 facility from attacks by Republican leaders, trying "covertly to destroy the great nitrogen plant at Muscle Shoals."<sup>64</sup> By the spring of 1921, fiscal conservatives in Congress began fighting back. Led by Wisconsin Republican Irvine Lenroot, they pointed to the Muscle Shoals project as unwarranted pork. They believed that supporters of the project were using the farmers as an excuse to pump more money into Muscle Shoals, which still needed millions more to complete.<sup>65</sup> In early March, a \$10,000,000 Muscle Shoals appropriation was defeated in

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<sup>63</sup> In particular the Wadsworth-Kahn Bill enjoyed widespread support. See, "Farmers Compile Political Roster," *Christian Science Monitor*, 11 September 1920, 1; and the 1920-1921 clippings from Oscar Underwood, "Muscle Shoals Scrapbook," [ca. 1923-4], 120: "Muscle Shoals Scrapbook," Underwood Papers, ADAH.

<sup>64</sup> "Text of Platform Adopted by the Democratic Convention," *Washington Post*, 3 July 1920, 4.

<sup>65</sup> *Congressional Record* (Senate), 66<sup>th</sup> Cong., 3<sup>rd</sup> sess., 1921, 60, pt. 4: 4433.

Congress. Worthington promised that the “setback” was “temporary” and that the next session of Congress would surely restore the flow of funds to the construction site. The Florence Chamber of Commerce promised to stay in constant communication with Alabama’s congressional delegation.<sup>66</sup> Without the funds to continue, the War Department placed construction of Wilson Dam on “standby” condition. In a matter of weeks, the workforce dropped from 2,000 to 500, and then to the bare minimum needed to perform basic maintenance. The Wilson Dam Club held a “Farewell Dance” to wish its former members well as they left for homes or work in other parts of the country.<sup>67</sup> On April 30, 1921, work on the dam halted. Months after Alabama’s delegation and the farmers of the country fought to maintain the government’s role at Wilson Dam, Secretary of War John Weeks told a trade magazine that he planned to ask Congress for the \$30,000,000 needed to complete Wilson Dam, but only if some commercial organization would “show faith enough in Muscle Shoals to agree to take over the project after it shall have been completed.”<sup>68</sup> With little hope for a future of government operation at Muscle Shoals, the War Department sought other alternatives, particularly a private lease of the facilities that might convince Congress to release appropriations. As time would show, many Alabamians were very willing to make similar compromises on behalf of the promise of development.

The year 1921 marked an important shift in the battle over the Muscle Shoals development. As Congress grew increasingly reluctant, War Department officials began a search

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<sup>66</sup> “Bill Is Defeated, Dam Amendment Loses, Will Take Up Fight Next Congress,” and “Fight Is Not Our Middle Name, It Is All the Name We’ve Got,” *Florence Times*, 4 March 1921, 1.

<sup>67</sup> “Last Week of Real Work at Wilson Dam,” *Florence Times*, 8 April 1921, 1.

<sup>68</sup> “Would Complete Project,” *Florence Times, Muscle Shoals Section*, 13 May 1921, 1.

for a private company that might be willing to lease the facilities, thereby returning to the government some of its investment in the project and convincing Congress to approve appropriations to finish the dam. At the beginning of April, Chief Engineer of the Army Lansing Beach contacted J.W. Worthington, looking for advice on potential investors. Worthington suggested that Beach contact automobile manufacturer Henry Ford. Within days, Ford stated his interest and began planning a trip to see the facilities.

In June, Ford arrived in the Muscle Shoals area unannounced and toured the recently completed Wilson Dam and the two government nitrate plants, inactive since their completion during World War I. Ford tried to downplay the visit, saying that he hoped to use hydroelectric power in his own factories in Michigan, but the *Florence Times* ran the story on the front page, and the “Tri-Cities” (Florence, Sheffield, and Tuscumbia) buzzed with the possibility that Ford was considering a lease of the facilities: “Florence may expect to become a great manufacturing center, and a big city, at a much earlier date than has been anticipated.”<sup>69</sup> The next month, Ford submitted an offer for the plants. As long as the government promised to complete the work on the project in a timely manner, Ford agreed to lease the dam for a period of one hundred years, paying the government \$28,000,000 for the value of the facilities at 6% interest over the period of the lease, as well as a maintenance fee. He planned to purchase the nitrate plants, equipment, and land for \$5,000,000 in return for the government’s assurance that it would continue the planned construction of “Dam 3,” an additional hydroelectric dam several miles upriver from Wilson. Dam 3 would allow for increased water flow over Wilson’s turbines (and thus produce more power for Ford). He would then lease the new dam. Ford promised to make hydroelectric power cheaply available to the farmers of the area, and agreed to use the nitrate plants to make higher grade fertilizer at the lowest possible price. He suggested the creation of a board of

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<sup>69</sup> “Henry Ford Visits the Wilson Dam,” *Florence Times*, 17 June 1921, 1.

farmers' organizations, including the Farm Bureau, National Grange, and Farmers' Union, to oversee his fertilizer production to make sure he kept prices low.<sup>70</sup> Ford seemed to offer salvation for the struggling farmers of North Alabama. Already nationally known as a successful businessman, Ford was turning his substantial fortune and organizational wizardry to the solution of the growing problem at Muscle Shoals.<sup>71</sup>

By November, no longer trying to hide his intentions, Ford sat down to speak with a correspondent from the International News Service and boasted of the economic potential of the Muscle Shoals properties. He claimed that he would employ a million men in the South by bringing in industries that would develop the region. He called for a "dozen dams" on the Tennessee River and noted that with each unit of horsepower produced, he could hire one extra man in his plants. Ford also appealed to the region's agricultural needs. The nitrate plants would produce enough fertilizer to improve the entire cotton belt and run farms more efficiently, allowing farmers to work an average of only twenty days per year. Freed from the farms, southerners would spend the rest of the year working in a factory near home for cash. Finally, Ford announced that in December, he would make a second visit to Muscle Shoals, accompanied by his friend Thomas Edison, who would give suggestions on the use of hydroelectric power to fuel industries. For his part, Edison added to Ford's pronouncements: "Henry Ford is the first man in the country who has had sufficient imagination to see the opportunity and take advantage of it."<sup>72</sup>

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<sup>70</sup> *Congressional Record* (House), 67<sup>th</sup> Congress, 1<sup>st</sup> Session (61:5), 25 July 1921, 4285-6; and "Henry Ford Backs Nitrate Project," *Christian Science Monitor*, 15 July 1921, 2.

<sup>71</sup> The details of Worthington's work to obtain Ford's offer are detailed in a letter that Beach wrote to Tennessee Senator Lawrence D. Tyson, 15 October 1926, which was reprinted in the *Congressional Record* by Alabama Congressman Lister Hill. See *Congressional Record* (House), 69<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1927, 68, pt. 2: 1304-6.

<sup>72</sup> "I'll put the South on the Map,' Says Ford," *Wall Street Journal*, 18 November 1921, 11; "Ford's Muscle Shoals Plans a National Benefit, Says Edison," *Wall Street Journal*, 23 November 1921, 3.

Ford, Edison, and Ford's son, Edsel, arrived in the Tri-Cities on Saturday, December 3, and toured the properties, guided by J.W. Worthington. Edison inspected Wilson Dam and the chemical plants and to no one's surprise, stated that he planned to support Ford's bid for the properties. He boasted that given Ford's vast experience in manufacturing, he would make Muscle Shoals an American institution. The party was feted throughout the region, boating on the Tennessee River to see the Muscle Shoals Canal and the upstream site for Dam 3. The group even attended an "old fashioned southern barbecue" at a local residence. Ford, Edsel, and Edison even visited a local school, which let out students to shake hands and collect autographs. The short visit ended with Ford catching the Sunday train, and he left a promising message for the people of the Muscle Shoals District: "[If] the Ford organization takes over the Muscle Shoals development the country roundabout will experience a great wave of prosperity."<sup>73</sup>

Between 1921 and 1924, Ford's offer for Muscle Shoals dominated discussions over the future of the plants. As Congress debated the merits of Ford's terms, the public took sides. In North Alabama, support for Ford resulted in mass meetings, numerous editorials praising the Detroit manufacturer, and a renewed real estate boom that taxed the surrounding countryside. His grand pronouncements went largely unquestioned as residents rushed to support his claims. Most seem to have taken for granted his ability to build a successful business, and given the dire condition of agriculture and the growing disappointment over the stalled project, Ford seemed an economic savior. The Ford offer sat in Congress for just over three years, but it had a profound effect on the direction of development in the Tennessee Valley. While Ford stressed his willingness to utilize the nitrate plants and dam for the benefit of agriculture, his status as a

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<sup>73</sup> "Ford Party Returns to Their Home," "Edison to Recommend Acceptance," "Ford Party Enjoys 'Cue,'" and "Ford Gives Message to the People," *Florence Times*, 9 December 1921, 1. Richard C. Sheridan, a research chemist at TVA's National Fertilizer Development Center (located at the Muscle Shoals nitrate plant), reconstructed Ford and Edison's trip in "Thomas Alva Edison's Visit to Muscle Shoals," *The Journal of Muscle Shoals History* XI (1986): 127-133.

manufacturer caused many Alabamians to consider the possibility that Muscle Shoals could mean more than cheap fertilizer and rural electrification. Ford could bring new industries to the Valley that would create employment opportunities for struggling farmers and non-farmers alike. Many Alabamians, especially the congressional delegation, became ardent supporters of private development of the projects at Muscle Shoals, even as Nebraska's George Norris forcefully made the case for government operation. In the end, Ford's bid failed in the face of congressional opposition, but he left a lasting legacy for the economic development of the Tennessee Valley.

As his biographers have noted, the early 1920s were perhaps the height of Ford's national popularity. The Ford Motor Company found itself in the forefront of Jazz Age economic prosperity, yet the magnate himself crafted a public image that stressed humanitarianism over financial profit. Ford portrayed himself as "the greatest of manufacturers, the fairest and most liberal of employers, a practical philanthropist who has brought hope and sunshine into millions of homes."<sup>74</sup> His Midas-like reputation brought numerous offers from across the country. Nebraska invited Ford to improve the state's waterpower resources, Michigan asked for help to organize the state railroad system, and in 1922, the *Wall Street Journal* suggested "Why Not Ford for President?"<sup>75</sup> Ford actively cultivated his image as a "constructive pioneer." In a 1922 autobiography, he stressed the importance of meeting consumer needs: "Well-conducted business enterprises cannot fail to return a profit but profit must and inevitably will come as a reward for good service."<sup>76</sup> Many of his maxims were inspired by Muscle Shoals. Hydroelectric

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<sup>74</sup> L.R. Collier, qtd. in Allan Nevins and Frank Ernest Hill, *Ford: Expansion and Challenge, 1915-1933* (New York: Charles Scribner's Sons, 1957), 301.

<sup>75</sup> *Ibid.*, 301-2.

<sup>76</sup> Samuel Crowther and Henry Ford, *My Life and Work* (Garden City, NJ: Doubleday, 1922; reprint, Garden City, NJ: Garden City Publishing Co., 1926), 273-4. Page numbers are from the 1926 edition.

power could “increase and cheapen production so that all of us may have more of this world’s goods.” It could run machines and “liberate man from brute burdens, and release his energies to the building of his intellectual and spiritual powers for conquests in the fields of thought and higher action.”<sup>77</sup> Power should be a “public service,” not a “private profit.”<sup>78</sup> Engaged in a contest with a private utility that many perceived to be a profit-driven trust, Ford’s rhetoric was especially potent. In North Alabama, and across the country, his supporters believed he was an industrialist with a heart, a magnate who would disavow profiteering in favor of community responsibility. Farmers trusted him to give them the fertilizer they needed, even if he did not realize an immediate profit, and workers could expect jobs and paychecks, assured that Ford’s wages would take into account their needs and desires, not his profit margins.

As Douglas Brinkley argues in his centennial history of Ford Motor Company, *Wheels for the World*, Henry Ford’s philanthropic image was carefully constructed. The manufacturer’s public persona masked a willingness to use any means necessary to keep his factory running smoothly. Even as Ford’s five-dollar-day plan earned him praise as “the best friend the working man ever had,” the manufacturer hired “evaluators” to ensure that workers’ home lives fit with his qualifications for a subservient workforce. When laborers signed new contracts accepting the higher pay, they gave explicit consent to have his new “sociological department” investigate their “qualifications.”<sup>79</sup> Ford hired former boxer Harry Bennett to head his “Service Department,” gathering informants among the line workers and using physical force to prevent workers from unionizing or protesting.<sup>80</sup> Thus, through industrial espionage and intimidation,

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<sup>77</sup> Samuel Crowther and Henry Ford, *Today and Tomorrow* (Garden City, NJ: Doubleday, Page and Co., 1926), 167.

<sup>78</sup> *Ibid.*, 272.

<sup>79</sup> Brinkley, *Wheels for the World: Henry Ford, His Company, and a Century of Progress, 1903-2003* (New York, 2003), 165-73.

Ford kept overt opposition, and particularly labor organization, at a minimum while maintaining a semblance of caring oversight. As beneficent as they may have seemed, Ford's reforms worked to create a relatively docile and efficient workforce. As the industrialist stressed the humanitarian aspects of his plan for Muscle Shoals, many of his supporters chose to ignore his faults and focus solely on his philanthropy. They failed to ask what Ford saw in Muscle Shoals that was worth years of legislative conflict and harried negotiations. Instead, Ford's carefully constructed reputation convinced many Valley residents of a solution to their economic difficulties.

Within weeks of submitting his bid to Congress, Ford enjoyed a remarkable boost of popularity among the people of the Muscle Shoals district. Just as the project began to stagnate, Ford came to the rescue. A crowd gathered at the Florence courthouse overwhelmingly voted to support the Ford offer, calling for local officials to take word to Washington that "Mr. Ford should have Muscle Shoals." Particularly interesting was Ford's "deadly aversion to profiteering."<sup>81</sup> Farm Bureau President J.R. Howard approved the offer, especially Ford's promise to produce fertilizer at an 8% profit. Concerned citizens even created their own Alabama-Muscle Shoals Association, charging membership dues to help fund delegations to Washington to lobby Congress, and giving each member a "Ford Button" to express their loyalties.<sup>82</sup> People came to support the Ford offer for a number of reasons, many of which reflected their own feelings about the future of the regional economy.

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<sup>80</sup> Greg Grandin, *Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City* (New York: Metropolitan Books, 2009), 70.

<sup>81</sup> "People Want Ford to Come"; and "They Want Mr. Ford," *Florence Times*, 22 July 1921, 1, 2.

<sup>82</sup> "Farmers Indorse Muscle Shoals Plan," *Christian Science Monitor*, 22 July 1921, 8; and Untitled Advertisement, Alabama Muscle-Shoals Association, *Florence Times*, 7 April 1922, 3.

For those who had hoped that Muscle Shoals would provide a boost to southern agriculture, Ford's offer promised cheap, reliable, high grade fertilizer to farmers across the district. In June 1922, the House Committee on Military Affairs recommended the McKenzie Bill, which would lease the project to Henry Ford. Chairman John C. McKenzie, who crafted the bill, recommended full acceptance of Ford's offer, stating that the only other alternative, government operation, would require so many levels of bureaucracy that it would drive the price of fertilizer to new heights.<sup>83</sup> William B. Bankhead, an Alabama congressman, made the case particularly plain, outlining his "personal confidence in Henry Ford" and stating that Ford would cut fertilizer bills in Alabama and the rest of the country "half in two."<sup>84</sup> Ford included the major national farmers' groups in his proposal, agreeing to allow them to sit on a board to oversee fertilizer sales. In return, the American Farm Bureau began circulating pamphlets in Congress stressing its support for the Ford offer.<sup>85</sup> Writing for the *New York Times*, William Jennings Bryan noted the political importance of the farm bloc's support of Ford. Bryan called the condition of the farmer one of the major questions for the election of 1924, and presented Ford's offer as the chief solution to the problem. Should Congress fail to give Ford the nitrate plants, the farmers of the country would make it a "paramount issue" in the next presidential campaign, and they would be joined by consumers, who would realize that affordable fertilizer would result in cheaper farm products and cheaper hydroelectricity.<sup>86</sup> Bryan stopped well short of predicting another agrarian revolt, but he carried a strong message to the halls of government.

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<sup>83</sup> McKenzie, House Committee on Military Affairs, "Muscle Shoals Propositions," 67<sup>th</sup> Cong., 2<sup>nd</sup> sess., (Report 1084), 9 June 1922, 44:4, Underwood Papers, ADAH.

<sup>84</sup> *Congressional Record* (House), 67<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1922, 61, pt. 8: 8685.

<sup>85</sup> "Farmers Indorse Ford's Muscle Shoals Offer," *Washington Post*, 12 June 1922, 2.

<sup>86</sup> William Jennings Bryan, "Bryan Sees Farmer Outstanding Problem," *New York Times*, 22 July 1923, XX3.

Ford's offer was becoming increasingly popular among farmers, who understood that the industrialist might use his business acumen to revitalize the South's agricultural economy.

The potential for a Ford plant at Muscle Shoals inspired hyperbole. In the *Florence Times*, reporter Littell McClung called Nitrate Plant 2 the "most valuable manufacturing establishment ever built in any part of the world" and suggested that even the American Farm Bureau (undoubtedly an expert in agricultural production) expected the plant to revolutionize southern farming. McClung did not point to the cost of the plant, which was a sore spot with many of Ford's opponents in Congress, or even the amount of power it would use from Wilson Dam, which rankled many supporters of private utilities. Instead, McClung pointed to the "wealth-creating power of its output." The operation of the nitrate plant would increase crop yields. Soon, as farmers produced more and more crops, goods would become cheaper. More fertilizer also meant larger quantities of cotton, which would then increase agricultural revenues and allow farmers to climb out of oppressive mortgages.<sup>87</sup>

In hindsight, McClung's faith in fertilizer seems misplaced. In fact, overproduction in a one-crop region, combined with a shrinking market for American cotton, was largely responsible for the poverty of southern farmers. Yet McClung was echoing the beliefs of many in North Alabama who had first supported the development of nitrate plants at Muscle Shoals during World War I for their potential to create cheaper and more widely available fertilizer. Farmers still believed that if fertilizer costs could be reduced, agriculture would once again become a viable livelihood for most southerners. As Gray Silver, the Washington Representative of the American Farm Bureau Federation, wrote to Congressman Lister Hill, "The high price of these commodities is the thing which is bleeding agriculture white and if persisted in will develop

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<sup>87</sup> Littell McClung, "Nitrate Plant No. 2 Is Most Valuable Plant in the World," *Florence Times*, Section 2, 15 December 1922, 1.

peasantry on the farms of America.”<sup>88</sup> Alabama Senator Thomas Heflin drew on Ford’s past industrial success to promise agricultural revitalization. The industrialist used his experience to make a car more cheaply than any other, despite opposition from other auto manufacturers, and he surely would make a similar fight against fertilizer companies which keep their prices too high.<sup>89</sup> With Ford at Muscle Shoals, all farmers would have a chance to buy fertilizer, just as all his workers had a chance to buy a Model T.

As his bid suggests, Ford understood the importance of placating agricultural interests. He promised to use his nitrate plants solely for the production of fertilizer. However, the nation’s preeminent industrialist could not ignore the potential for manufacturing in the Tennessee Valley. As Congress debated his offer, he began to outline his vision for the future of Muscle Shoals. In August, Ford prophesized that he could build a city of 100,000 in the area, all employed in factories powered by the Tennessee River.<sup>90</sup> Yet Ford did not limit himself to the area directly surrounding his plants, and soon suggested that he could transform the South into an industrial center. He foresaw a seventy-five mile-long metropolis, stretching from Muscle Shoals to Decatur, made up of cities and towns interspersed with small tracts of farmland. Foreshadowing later Tennessee Valley Authority plans for the region’s development, Ford promised that his metropolis would allow families to live in small communities and retain the “benefits” of rural life while still receiving an industrial paycheck.<sup>91</sup> His vision was, as his biographers noted, a “memorable object lesson” in the coexistence of agriculture and industry.<sup>92</sup>

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<sup>88</sup> Silver to Hill, 14 March 1924, 32:5, Lister Hill Papers, Hoole.

<sup>89</sup> *Congressional Record* (Senate), 67<sup>th</sup> Cong., 4<sup>th</sup> sess., 1922, 64, pt. 1: 173, 177.

<sup>90</sup> “Ford Predicts 100,000 People,” *Florence Times*, 5 August 1921, 1.

<sup>91</sup> “Ford Plans a City 75 Miles in Length,” *New York Times*, 12 January 1922, 1.

<sup>92</sup> Nevins and Hill, *Ford*, 310.

In fact, Ford had already attempted to create a “village industry” program in Michigan’s Upper Peninsula. As at Muscle Shoals, he hoped to “fit agriculture and industry together so that the farmer may also be an industrialist and the industrialist may also be a farmer.”<sup>93</sup> No matter its location, the manufacturer’s plan sought to combine an industrial wage and a pastoral lifestyle; however, few Valley residents embraced his dream. To the people of the Tennessee Valley, Ford meant factories, whether those factories served to boost the production of local fields or brought industrial jobs to a struggling regional economy.

In January 1922, Mrs. Charles H. Durham, the chairwoman of the Women of the Twentieth Century Club, wrote to her congressman with resolutions in support of the Ford offer. Noting the “distressing conditions of employment” in the region, Durham called for Tennessee Democrat Lawrence D. Tyson to support Ford’s offer, which would bring relief by creating jobs and putting the inactive plants to use.<sup>94</sup> Durham did not ask for Tyson to support Ford for fertilizer, navigation, or for rural electrification. Instead, she saw the offer as an opportunity for increased employment, a concern that had been growing in the Shoals District since dam construction had slowed. She was not alone. C.C. Bailey wrote to the editor of the *Florence Times*, detailing his support for this “man of vision”: “In Ford’s own words he will need a million men. The houses, the schools, the churches, manufacturing enterprises, mercantile lines, shops and every conceivable thing imaginable will be in full force.” Bailey called Ford’s plan a “God-sent opportunity to enable our farmers and employees all over Alabama to stop making cotton that is bringing us to absolute want.”<sup>95</sup> Bailey exhibited more foresight than many fellow

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<sup>93</sup> Qtd. in Grandin, *Fordlandia*, 67-8. Greg Grandin’s *Fordlandia* focuses on Ford’s ultimately futile attempt to create a similar industrial village in the Amazon Basin.

<sup>94</sup> Durham to Tyson, 13 January 1922, 32:1, Hill Papers, Hoole.

<sup>95</sup> C.C. Bailey, “Let Ford Have Muscle Shoals,” *Florence Times*, sec. 2, 16 December 1921, 1.

Alabamians, demonstrating a keen understanding of the problems inherent in farmers' reliance on cotton.

Some compared Ford's Muscle Shoals to Birmingham, which exploded in population with the advent of the city's iron and steel industry. Ford seemed to recognize similar potential in the Valley, and for some observers, development there would be the next step in the progression of the South's shift to an industrial economy.<sup>96</sup> Yet supporters hoped that Ford's industrial future would more carefully consider the needs of the all residents, not just the factory owners. Ford emphasized this possibility, blaming utilities for keeping industry out of the region. He noted, "If Muscle Shoals is developed along unselfish lines, it will work so splendidly and so simply that in no time hundreds of other waterpower developments will spring up all over the country and the days of American industry paying tribute for its power would be gone forever. I am consecrated to the principle of freeing American industry."<sup>97</sup> Relying on his humanitarian persona, he promised that he could safely bring industry to the South, caring for workers and the community while providing for agriculture and the farm population.

More than any other city, Florence embraced the industrial possibilities of bringing Henry Ford to Muscle Shoals. The city had been an early supporter of using the nitrate plants as a base for the expansion of the regional economy, and Ford's status seemed to vindicate their own hopes for the District. In nearby Huntsville, a chamber of commerce publication promised that the Valley would blossom just as Niagara Falls had, using cheap hydroelectricity to power factories. Huntsville's leaders hoped that power generation at Muscle Shoals might give the surrounding towns and cities "commercial advantages which will make this location second to

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<sup>96</sup> "Holland's Letter," *Wall Street Journal*, 8 September 1921, 3; and "South Sees in Ford a Good Organizer," *Wall Street Journal*, 15 November 1922, 10.

<sup>97</sup> Qtd. in Nevins and Hill, *Ford*, 310.

none as a center of these rapidly growing electric furnace industries.”<sup>98</sup> Florence residents shared similar hopes. According to one correspondent, Florence entered a “state of suspended animation” as “boosters, barbers, chambermaids and hardened newspaper men” all looked to the boom that would attend Ford. Sloss-Sheffield Steel and Iron purchased land in Florence, hoping to operate on Wilson Dam power, and city leaders expected railroads to run new lines to the city.<sup>99</sup> Locals built on Ford’s already inflated predictions. Florence would get its own small dam, creating a harbor for the city that would be able to serve the entire Shoals district. Three “transcontinental” highways would crisscross the district. Ford would immediately hire 5,000 workers to operate the nitrate plants, and spend \$50,000,000 in factories and industries, paying “excellent wages” to a million men. As Littell McClung bragged, “[Ford] will be on the Tennessee River and starting industrial development such as even Detroit and Chicago have not seen.”<sup>100</sup>

The Tri-Cities would experience dramatic change if Ford fulfilled even a fraction of his promises, but the hoopla over the nitrate plants and dam brought confusion instead of organized development. Just as real estate speculation increased in Florence after the news of the initial appropriation for Muscle Shoals, rumors of Ford’s industrial-agricultural Eden sparked a second, larger real estate boom that threatened regional infrastructure. The *New York Times* compared the real estate boom at Muscle Shoals to California and the Klondike following the discovery of gold. “Prospectors, investors and adventurers” flocked to the Tri-Cities, buying up available

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<sup>98</sup> Huntsville and Madison County Chamber of Commerce, *Happy Hustling Huntsville: The Undisputed Queen of the Tennessee Valley and the Biggest Town on Earth for It’s [sic] Size* (Huntsville: Monroe Printing Company, 1919), 6, in Hoole.

<sup>99</sup> “Present Condition of Wilson Dam in Muscle Shoals Power Project Which Alabama Is Eager to See in Henry Ford’s Hands,” *Christian Science Monitor*, 23 August 1922, 5.

<sup>100</sup> Littell McClung, “Resources and Advantages for Great Manufacturing Industries,” *Florence Times*, 26 January 1923, 2-3.

land and marking off lots as small as could be sold – the “quaint and peaceful old towns of Northern Alabama” were unrecognizable.<sup>101</sup> The new Weeden Heights subdivision was typical of the boom towns that sprang up around the dam area. Owners advertised lots “within a few hundred feet” of the Wilson Dam reservation, and the “very finest drinking water” carried by privately built water lines. Future residents would never be forced to drive home through the “usual unsightly sections commonly associated with the exits from a city” since “there are no negroes living in that section of the city.” The lots measured 7,500 sq. ft. (less than 1/5 of an acre) and sold for \$450-\$500 each.<sup>102</sup> The Florence Chamber of Commerce pushed for an investigation into the buying and selling practices of the companies responsible for developments like Weeden Heights and noted the more egregious scams. While some of the new subdivisions were located near Florence, many were miles from the city. The Shoals City Development Company of Bowling Green, Kentucky, sold a 2,500 sq. ft. lot located 15 miles from Florence to a fellow Kentuckian for \$10.00 after purchasing the land from a local farmer for \$12.50 an acre, a mark-up of 1,400%.<sup>103</sup> The chamber struggled to rein in buyers and sellers alike. Leaders suggested various strategies, including committees to oversee transactions, welcome parties to advise newcomers interested in purchasing land, a concerted effort to personally convince major landholders to keep land valuations reasonable, and a “progressive movement” to draw up specific zoning limits.<sup>104</sup> There was little the city could do. During the last half of 1921, more

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<sup>101</sup> “Rush for Muscle Shoals,” *New York Times*, 12 February 1922, 69.

<sup>102</sup> Advertisement, “Weeden Heights Subdivision,” *Florence Times*, 10 February 1922, 3. In 1921, the *New York Times* reported that an acre of American farmland was worth approximately \$84. See “Farm Land Prices,” *New York Times*, 3 April 1921, 105.

<sup>103</sup> “C. of C. Says Investigate Land Offered,” *Florence Times*, 3 February 1922, 1.

<sup>104</sup> “Real Estate and Rentals the Subject,” *Florence Times*, 11 November 1921, 1; “City Zone Ordinance Considered,” *Florence Times*, 28 October 1921, 1.

than \$1,000,000 worth of property changed hands in the town of Sheffield alone.<sup>105</sup> Companies such as Jackson Insurance and Real Estate Company used Ford as bait, promising that his participation would insure a wave of construction that would bring numerous plants to the area, giving every property owner in Florence “new inspiration” and “new hope.” Even as property values inflated to ridiculous levels, Jackson Insurance assured potential buyers that “it would be impossible to conceive of a better and more favorable time” for existing landowners to add on or for first time buyers to buy land in the city.<sup>106</sup>

Muscle Shoals exemplified the land booms of the 1920s. Southern Florida witnessed a similar boom as a mixture of climate, the arrival of the affordable automobile, and economic prosperity led thousands to the “Sunshine State.” Miami’s population more than doubled from 30,000 in 1920 to 75,000 in 1925, and may have surpassed 150,000 in the succeeding months. As in Muscle Shoals, buyers chose lots from maps in realty and investment offices hundreds of miles away from the actual property. The bubble burst when a series of hurricane hit the state. As Frederick Lewis Allen noted, “[M]any of the millions sunk in developments had been sunk for good and all ... and the lesson of the economic falsity of a scheme of land values based upon grandiose plans, preposterous expectations, and hot air had been taught in a long agony of deflation.”<sup>107</sup> Muscle Shoals added to that lesson.

The fortunes of real estate rose and fell with those of Ford’s offer. By early 1923, real estate activity began to decline, though it would not fall off completely until Ford’s bid was completely withdrawn. Instead, real estate speculators bided their time, waiting to hear whether

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<sup>105</sup> “Muscle Shoals Values Soar as Boom Is Awaited,” *Christian Science Monitor*, 9 February 1922, 1.

<sup>106</sup> Jackson Insurance and Real Estate Company, Advertisement, “Henry Ford Has Put the Muscle in the Shoals,” *Florence Times*, 26 August 1921, 4.

<sup>107</sup> Allen, *Only Yesterday: An Informal History of the 1920’s* (New York: Harper & Row, 1931), 226-37, quote on 235.

Congress accepted Ford's offer. They remained optimistic that Ford would "surely get the Shoals at this season."<sup>108</sup> In the meantime, the Tri-Cities workforce reaped the benefits. Ford's interest in the plants spurred Congress to allot \$7,500,000 to continue the construction on the dam. In addition to employment on the projects, workers found jobs constructing houses and improving lots. Cotton mills and lumber companies benefited from the number of migrants coming to the Tri-Cities looking for work.<sup>109</sup> The pause in speculation even gave Florence time to address some of the more egregious sales techniques that had been used in the boom. The Better Business Bureau rebuked a New York realty agency, Howell and Graves, which used an altered map highlighted by images of Henry Ford and Thomas Edison to sell swampy land described as "high and dry." The company told potential investors that a congressional straw vote had been taken and the results indicated that Ford would assuredly get the lease.<sup>110</sup>

Ford's popularity marked an important transition from majority support for public ownership and operation to a growing belief that only private investment would bring the project to completion. For some, the possibilities of private investment meant a renewed chance to actually put the plants into operation instead of waiting on the results of political wrangling. One important aspect of the shift towards Ford and private operation was the tenor of the national political scene. In his 1923 presidential message, Calvin Coolidge presented a clear solution to the question of the nitrate plants and dam: "I recommend that this property ... be sold. This would end the present burden of expense and should return to the Treasury the largest price possible to secure." Not only would private operation end the constant search for appropriations,

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<sup>108</sup> "Real Estate Activity at Muscle Shoals Dies Out," *Wall Street Journal*, 3 March 1922, 8; and "Work on Wilson Dam Is Still Going On," *Wall Street Journal*, 28 March 1923, 10.

<sup>109</sup> "Florence Is Undergoing Fine Growth," *Florence Times*, 18 August 1922, 1.

<sup>110</sup> "Muscle Shoals Lot Sales Up to Court," *New York Times*, 22 April 1923, 11.

but a private company would also be more suited to experimentation in fertilizer production by water power, which would lead to cheaper products for farmers.<sup>111</sup> The *Florence Times*, which had previously called for public operation as a way to keep prices down, also favored private operation. In fact, the editorial staff at the *Times* advised those congressmen who wanted government operation of the plants to follow the advice of Major General Leonard Wood, then governor of the Philippines, whose wartime experience proved to him that a government involved in business development would lose “many millions of pesos.”<sup>112</sup> On the floor of the Senate, Alabama’s Thomas Heflin made similar claims. In Heflin’s view, the government should only go into business as a “last resort.” As a tried and tested businessman, Heflin argued, Ford would be able to make the crucial decisions to develop the entire Tennessee River for its maximum potential. For many, the shift from public to private operation of the nitrate plants was expedient. Ford’s exciting bid shifted public opinion away from government operation. Residents believed that only private investment would revitalize the project, and Ford’s persona and promises exuded a sense of inevitability. For the Tennessee Valley, the primary concern was operation of the plants. Everything else was negotiable.

The Alabama Power Company, too, showed a strong interest in the properties, and during the 1920s, Alabama Power fought to recover control of the development of the Tennessee River and add the hydroelectric power from Wilson Dam to their statewide network. The utility saw the Ford offer as another in a line of betrayals, especially since the magnate had been first approached by J.W. Worthington, the company’s former vice president. Alabama Power and a group of southern power companies proposed a lease of the hydroelectric dam, promising to give

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<sup>111</sup> “Text of President’s Message,” *Washington Post*, 7 December 1923, 1; and “Coolidge Recommends Sale of Shoals,” *Florence Times*, 7 December 1923, 1.

<sup>112</sup> “The Government Cannot Successfully Conduct Business,” 17 November 1922, *Florence Times*, 2.

the government enough power to run the nitrate plants at no charge and agreeing to federal regulation of power rates from the dam. The bid allowed the government to retain control of the plants, to dispose of as Congress and the president saw fit. The offer was remarkably restrained, yet the utility found itself in a very different situation than Henry Ford. Where Ford enjoyed widespread support, Alabama Power faced vehement public outcries. Politicians loathed adding power to the private utility's system, which many saw as a massive statewide monopoly, even though Alabama Power's network was the only possible outlet for any electricity produced at the dam. As congressmen debated the relative merits of the two bids and the possibility of government ownership, Alabama Power became a scapegoat for the worst fears of Alabamians facing the potential of a statewide power monopoly. The debate over Alabama Power in the early 1920s set the stage for future discussions of the merits of private utilities, and would provide an important precedent for the later calls for government development that led to the creation of the TVA.

In November 1921, Alabama Power solidified its interest in the project by signing an "indefinite" contract to produce power at a steam plant located at one of the nitrate plants. The announcement of the deal by Secretary of War John Wingate Weeks surprised many in the Tennessee Valley and in Washington, though he promised that the deal would be cancelled if Ford signed a lease for the facilities.<sup>113</sup> The deal gave Alabama Power an additional pool of power to use across the state, but the Tennessee Valley and its representatives feared more sinister motives. Alabama Governor Thomas Kilby relayed the "wrath of the people" at Alabama Power's apparent attempt to "frustrate" Ford's bid. Kilby noted that Ford's supporters had begun holding meetings, organizing through state chambers of commerce, all in an attempt to prevent Alabama Power from getting the facilities. In Gadsden, where Alabama Power

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<sup>113</sup> "Power Plant Leased," *Florence Times*, 11 November 1921, 1.

formed, the chamber of commerce favored Ford's offer as "far better for Alabama, and the entire country."<sup>114</sup> Florence's chamber made a much stronger case. In a set of resolutions from the chamber of commerce, Rotary Club, and the Exchange Club, members denounced Alabama Power as foreign-owned and suggested that, should the utility add the Tennessee to its network, it would drive rates upward. The organizations praised Ford, whose "mammoth plan of industrial development ... grips the imagination and thrills the enthusiasm of every American citizen."<sup>115</sup>

The citizens of Sheffield and Tuscumbia added their own fears of an Alabama Power-controlled Shoals. To give the plants to the utility would be to add to an "oppressive monopoly" that had "fastened its hold upon the public utilities of this State." In fact, if Congress failed to give the plants to Ford, the two cities' chambers of commerce argued that deferring action completely would be preferable to an Alabama Power lease.<sup>116</sup> Representative Edward Almon, defending the Ford offer on the floor of the House, included Alabama Power with the other "trusts" seeking to undermine the Muscle Shoals development. Alongside companies like American Cyanamid (whose patented process for nitrogen fixation was being used at Muscle Shoals), Virginia Chemical, and American Tobacco, Commonwealth & Southern (Alabama Power's parent company) sat in a web of interconnected stockholders whose desire for profits led to higher power and fertilizer costs. If Congress selected Alabama Power's bid for the facilities, it would give them the unwarranted gift of millions of dollars in federal investments.<sup>117</sup>

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<sup>114</sup> "It Would Be Most Unfortunate for the Alabama Power Co. to Get Muscle Shoals' – Gov. Kilby," *Florence Times*, 17 February 1922; and R.M. Jones, Secretary of the Gadsden Chamber of Commerce, to Hill, 18 February 1922, 32:1, Hill Papers, Hoole.

<sup>115</sup> Florence Chamber of Commerce, Florence Rotary Club, and Florence Exchange Club, "Resolutions," 20 February 1922, in *Ibid.*

<sup>116</sup> Resolutions Adopted by the Sheffield and Tuscumbia Chambers of Commerce, 17 February 1922, in *Ibid.*

Other Valley residents feared that the company's focus on electricity would overshadow the true reason for the development – fertilizer. The *Florence Times* highlighted these worries, accusing Alabama Power of fighting cheap fertilizer from the nitrate plants.<sup>118</sup> The attacks were unfair, since the utility's bid left the nitrate plants to the government's discretion. Alabama Power certainly had the experience necessary to develop waterpower from state rivers and their national and international financial backers gave them the economic strength to take on a multi-million dollar investment. Perhaps, had Ford's offer not been made public at the same time, Alabama Power might have enjoyed a different reaction among Alabamians eager for development. Instead, the two entities became immediate fodder for comparison, and Ford, with his lofty promises of agricultural and industrial development, easily overshadowed the statewide utility whose main concern seemed to be the power from the dam, not the people of the District.

The utility struggled to combat the stream of bad publicity coming out of North Alabama. In addition to the debates between Ford proponents and Alabama Power supporters, the utility called attention to its many acts of public service. In 1922, the utility formed a New Industries Division under T.D. "Tom" Johnson to actively recruit new companies to the state. While the campaign was an attempt to buttress power sales by adding new consumers, the division also looked to wean the state from its addiction to cotton monoculture. As Johnson would later stress, the New Industries Division provided tangible evidence that the utility cared about the economic future of the state.<sup>119</sup> Some state newspapers took up the utility's cause. In January 1924, the *Montgomery Advertiser* ran a political cartoon equating a rejection of the power companies'

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<sup>117</sup> *Congressional Record*, 67<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1922, 61, pt. 4: 3698-3707.

<sup>118</sup> "The Alabama Power Company," *Florence Times*, 17 February 1922, 2.

<sup>119</sup> Johnson, "The New Industries Division of Alabama Power Company: Its Purpose and Functions," [ca 1941-1942] in Folder 5.1.1.98.237., Alabama Power Corporate Archives.

offer for Muscle Shoals with a man shooting himself in the face. An accompanying article stated that the lease to Alabama Power and other utilities would “insure the building of many industrial enterprises at other cities than those in the immediate neighborhood of the Muscle Shoals district.”<sup>120</sup>

Alabama Power was not alone in its opposition to Ford’s offer for the facilities. In Congress, a large contingent still supported government operation of the nitrate plants. Led by Nebraska Senator George Norris, a progressive Republican, the group saw public control of the nitrate plants and dam as the only possible way to ensure that the country’s natural resources were used efficiently, and that the government saw returns on its investment. Senator Norris consistently claimed that he had “stumbled” into the debate over Muscle Shoals when Alabama’s Underwood funneled Ford’s bid into Norris’s Senate Agriculture Committee.<sup>121</sup> Norris and his fellow progressives quickly insisted on government operation of the plants. The transformation was so complete that Worthington soon complained to Underwood that Norris and his fellow congressmen were “perfectly infatuated” with the idea of government operation.<sup>122</sup>

In fact, Norris’s leadership of government-backed development at Muscle Shoals came relatively easily, thanks in part to the continuing influence of the conservation movement among progressive Republican legislators. Since the turn of the century, conservationists looked to the federal government to provide the funds for multi-purpose river development. Many of Alabama’s Democratic Congressional delegation, including Senator John H. Bankhead, Sr., had proven a reluctant ally of the movement, preferring government assistance for the development

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<sup>120</sup> Reprinted in *Powergrams*, Vol. IV, No. 10 (January 1924): 17-18, in Alabama Power Corporate Archives.

<sup>121</sup> George W. Norris, *Fighting Liberal: The Autobiography of George W. Norris* (Lincoln: University of Nebraska Press, 1992), 245; and Norman L. Zucker, *George W. Norris: Gentle Knight of American Democracy* (Urbana: University of Illinois Press, 1966), 117.

<sup>122</sup> Worthington to Underwood, [ca. 1921-2], 44:3, Underwood Papers, ADAH.

of local resources, with Muscle Shoals a prime example, over partisan politics.<sup>123</sup> Norris drew heavily on the rhetoric of early conservationists, including several government-backed studies, in calling for publicly funded waterways development on the nation's riparian resources. However, the senator stood at the forefront of a new brand of conservationism, which believed that "proper resource use and fair resource distribution could relieve rural poverty and raise rural incomes."<sup>124</sup> For conservationists, development at Muscle Shoals might rebalance the scales, encouraging the region to participate more fully in the national economy.

Norris had a perfect opportunity to practice his beliefs on the proper utilization of natural resources in 1913 when, as a member of the Public Lands Committee, he oversaw the development of the Hetch Hetchy Valley near San Francisco, California. One of California's Democratic representatives, John E. Raker, introduced legislation allowing the city to create a municipally owned reservoir in the Valley with a dam to provide hydroelectric power for the growing city. Raker then added controversial provisions into the reservoir bill allowing the city to distribute power. Norris quickly supported the Hetch Hetchy legislation, which he called the "highest act of conservation." Foreshadowing his later fight for publicly funded hydroelectric power from Wilson Dam, Norris promised, "Pass [the Raker legislation] and you put into the hands of the people a power God intended should do some good to man."<sup>125</sup> In supporting Raker, Norris won the enmity of numerous West Coast private power companies, particularly

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<sup>123</sup> Samuel P. Hays's *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920* (Pittsburgh: University of Pittsburgh Press, 1999), recently reprinted from the 1959 edition, provides an excellent overview of the conservation movement in the years before Norris's rise to power in the Senate. While Hays prefers to stop short of the fight over Muscle Shoals, his discussion of the conservationist views on resource development, and particularly multi-purpose waterways development, can easily be traced in the later writings of Norris, as well as Franklin D. Roosevelt. See pp. 100-21.

<sup>124</sup> Sarah T. Phillips, *This Land, This Nation: Conservation, Rural America and the New Deal* (New York: Cambridge University Press, 2007), 23.

<sup>125</sup> Qtd. in Zucker, *George W. Norris*, 115-6.

Pacific Gas and Electric, which wanted to protect its distribution rights in the region. Norris would later explicitly connect his perception of Pacific Gas with the work of Alabama Power, both of which were, in his estimation, “fattening [themselves] and tightening [their] strangle hold” on consumers. As the Nebraskan would later note in his memoir, the Hetch Hetchy debate (still ongoing when Norris left Washington in 1943) was “worthy of examination for the light that it sheds on the exact character of a fight which has been in progress for years.”<sup>126</sup> Thus, by 1922, Norris had specific experience in the utilization of natural resources. In fact, throughout the past decade, Norris had consistently enunciated his belief that the federal government held a certain responsibility to protect the rights of the people to access the nation’s physical wealth. Norris would bring the lessons learned in the fight for the Hetch Hetchy to the battle for Muscle Shoals.

Regardless of how he “stumbled” into the debate, Norris found the question of development of the Tennessee River the perfect opportunity to advance his conservationist beliefs. Power development and fertilizer production would certainly improve the southern economy, but only a broader project embracing flood control, navigation, soil protection, and hydroelectricity could effectively marshal the resources of the Tennessee River watershed.<sup>127</sup> The senator’s plan for government control of Valley resources called for a much broader investment than Ford’s narrow goals for Muscle Shoals and the Tri-Cities, but the people of the area had made up their minds. Norris was burned in effigy, criticized in the local press, and even sent death threats. In his autobiography, he recalled a tense visit to Muscle Shoals. Norris was escorted by an armed guard for his protection. Within the span of a few years, public opinion

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<sup>126</sup> Norris, *Fighting Liberal*, 162, 170.

<sup>127</sup> *Ibid.*, 248.

swung violently against government control of the project.<sup>128</sup> For Norris and his supporters, however, only a comprehensive resource development program would provide a foundation for future prosperity.

Norris fit Muscle Shoals into his larger conservationist vision, but he couched his argument in terms of fiscal solvency. Any decision concerning the plants and dam, he argued, must take into account the amount of money invested in the project. He equated privatization with selling U.S. battleships, planes, or the guns and munitions in forts and arsenals for scrap metal.<sup>129</sup> Despite the aura of humanitarianism that had grown around Ford, Norris warned that his motives might not be as selfless as many believed. True, Ford's industrial experience would allow him to run the plants and dam, but his supporters should remember that Ford's company revolved around profit. The manufacturer's payment and interest rate would only return a fraction of the original investment. Instead, the Ford bid made the plants and dam "the greatest gift ever bestowed upon mortal man since salvation was made free to the human race."<sup>130</sup> Norris enunciated a major concern with Ford's bid: the vagueness of his offer, particularly his plans for power consumption and fertilizer production. Many of his opponents argued that Ford would gain control of the plants and turn them towards his own manufacturing interests, particularly parts for his automotive plants.<sup>131</sup> In April 1922, Norris submitted a bill for government operation that included many of the features of the Ford bid, including a farmers' board to oversee fertilizer production, but which also included the broader development of the Tennessee Valley for hydroelectric generation, flood control, and general electrification. Combining his

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<sup>128</sup> *Ibid.*, 256, 259.

<sup>129</sup> Norris, "Report of the Committee on Agriculture and Forestry (accompanying S.J. Res. 227)," 67<sup>th</sup> Cong., 2<sup>nd</sup> sess., 20 April 1922, 12.

<sup>130</sup> *Ibid.*, 28.

<sup>131</sup> Hubbard, *Origins*, 140.

belief in resource conservation with a desire to activate the facilities at Muscle Shoals, Norris created the foundation for government-sponsored development in the Valley.

Norris found support among other congressmen who were just as eager to keep the project out of Ford's hands. In a debate over the McKenzie bill to accept Ford's offer, New York Congressman Fiorella LaGuardia compared the Muscle Shoals plants to the Teapot Dome scandal. LaGuardia warned that Ford might decide not to return the plants to the government in times of war when munitions were needed. Instead, the manufacturer would focus on profits, preferring continued prosperity for himself and his family over the lives of soldiers in the trenches.<sup>132</sup> William Brown McKinley of Illinois grounded his distaste for private ownership in the effects Ford's offer had on community development. The senator visited Muscle Shoals during an earlier attempt to develop the region, and he saw the boomtown conditions that swept the area in anticipation of government appropriations. McKinley understood the regional support for Ford, especially since he promised to keep the power in the communities surrounding the plants. Both Alabama Power and the government promised to transmit the hydroelectric power from Wilson Dam to an area spanning hundreds of miles. Yet while this might upset North Alabamians, McKinley argued, government operation would ultimately be a better decision, since it would meet the needs of people in the surrounding states, living in towns and cities and demanding cheaper power.<sup>133</sup> Norris and his colleagues used both the Ford and Alabama Power bids to strengthen the case for government operation. As the debate dragged on for nearly a decade, Norris became the leading voice for the federal government's development of Muscle Shoals and his work towards that end foreshadowed a much larger role for the government in the development in the South.

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<sup>132</sup> "Debate on Shoals Was Closed on Yesterday," *Florence Times*, 7 March 1924, 1, 3.

<sup>133</sup> *Congressional Record* (Senate), 68<sup>th</sup> Cong., 1<sup>st</sup> sess., 1924, 65, pt. 6: 5747-9.

With bids by Ford and Alabama Power before Congress, the fight over Muscle Shoals became heated in 1923 when debate centered on the Gorgas Steam Plant, an Alabama Power facility leased by the government to power the nitrate plants and facilitate dam construction. Ford insisted that the Gorgas plant was an essential part of his bid for the Muscle Shoals properties and demanded that the government include the plant in the property to be leased; however, Alabama Power's leaders refused to allow the plant to go to their rival along with the government facilities. When congressmen attempted to revise Ford's offer to remove Gorgas from the table, Ford told Julius Kahn, the Chairman of the House Committee on Military Affairs, that the bid before Congress was his final offer. Ford believed that the steam plant would be needed to produce nitrates economically at Muscle Shoals.<sup>134</sup>

The House Military Affairs Committee divided over the issue, unsure whether to encourage Ford to accept a lease without the steam plant or to force Alabama Power to transfer Gorgas to Ford.<sup>135</sup> Though the plant sat on the Black Warrior River, hundreds of miles from the dam and connected to the government facility by Alabama Power-owned lines, the public perceived the fight as another example of a utility roadblock to the development of Muscle Shoals. Former Alabama governor Emmet O'Neal called Alabama Power's actions a "state and national calamity" and referred to the utility as a "devil fish of selfish monopoly" with "slimy tentacles" that would "throttle" Alabama's industrial possibilities. In Mobile, a parade featured a band and marchers with signs reading "We Want Ford" and "To Hell with the Alabama Power Company."<sup>136</sup> When the power company tried to connect transmission lines from the Gorgas plant to Huntsville and other North Alabama cities to help meet electric demand, the towns

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<sup>134</sup> Ford to Kahn, 31 May 1922, 6:10, William B. Bankhead Papers, ADAH.

<sup>135</sup> "2 Ford Muscle Shoals Bills Are Introduced," *Florence Times*, 6 June 1922, 5.

<sup>136</sup> "Alabama Tells World Opinion of Power Co.," *Florence Times*, 3 March 1922, 1, 4.

rescinded permission and, under protest by a contingent of people of the Tennessee Valley, the Alabama Public Service Commission refused to allow the lines to be strung.<sup>137</sup> In September 1923, Alabama Power rejected an extension of the government's option on the Gorgas plant, and following the specifics of the original contract, the War Department sold the plant back to Alabama Power for just over \$3,000,000. The government engineers noted that the steam plant would not be needed under normal conditions to manufacture fertilizer, but the sale was a serious blow to Ford's offer, and just as importantly, his ego.<sup>138</sup> The Gorgas plant fight hinted that widespread public approval for Ford among North Alabamians did not mean a definite lease.

As it would again and again throughout the 1920s and 1930s, Alabama Power stressed the benefits that came from the company's interest in developing the waterpower of Alabama's rivers, but to no avail. Despite years of doing exactly what Ford was promising, using the development of hydroelectric power to foster agricultural and industrial growth, Alabama Power found itself fighting a losing battle. Ford's popularity among the people of the Tri-Cities translated into a political loyalty among Alabama's representatives, who consistently fought to lease him the properties. The utility, which had given the land to the government for the plant site, provided a steam plant to facilitate construction, and leased surplus power to help begin recouping the cost of the project, found itself described as a villain, a monopolistic trust determined to siphon electricity from the dam with no concern for the thousands of farmers looking for cheaper fertilizer. Alabama Power felt the effects. As President Thomas Martin later recalled, "The gift at Muscle Shoals in a time of national crisis is something the Company remembers with pride no matter how it came to be used against us, and against what we still

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<sup>137</sup> "Power Company Pleas Refused," *Florence Times*, 22 June 1923, 1; and "Tennessee Valley to Protest Power Co. Extension," *Florence Times*, 18 May 1923, 1.

<sup>138</sup> "Gorgas Plant Sold by the Government," *New York Times*, 25 September 1923, 9.

deem the philosophy and best interest of our country.”<sup>139</sup> Throughout the latter half of the 1920s, Alabama Power continued to fight for a lease of the properties, but their early competition with Ford provided the template for later struggles.

In May 1924, syndicated columnist John Temple Graves uttered words many Alabamians feared: “The battle royal [sic] for the lease of Muscle Shoals is ended, and Henry Ford has lost.” Relating information gathered from Ford’s assistants, Graves informed readers that the manufacturer had decided that his resources and money would be better spent elsewhere, and he planned to make no more concessions.<sup>140</sup> Worthington, who first elicited Ford’s interest in the development at Muscle Shoals, lost hope. In a letter to Congressman Lister Hill, Worthington confessed that he was bewildered and admitted, “I don’t know really what turn to take for the best.”<sup>141</sup> In October, Ford gave an interview with *Collier’s Magazine* and expressed his own frustration with the situation: “A simple affair of business which should have been decided by anyone within a week has become a complicated political affair. We are not in politics and we are in business ... we have passed Muscle Shoals. Productive business cannot wait on politics.”<sup>142</sup>

His disappointment was tangible. Three years earlier, his help had been solicited to put into operation a project that seemed doomed to dormancy. Ford drew up a bid that protected his own investment while honoring the original goals for the nitrate plants: the production of cheap fertilizer for regional farmers. He enjoyed widespread popularity and was treated to a hero’s welcome by the people of Muscle Shoals. Yet his bid bogged down in Congress as factions

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<sup>139</sup> Thomas W. Martin, *The Story of Electricity in Alabama* (Birmingham: Birmingham Publishing Company, 1952), 104, in Alabama Power Corporate Archives.

<sup>140</sup> John Temple Graves, “Opportunities before Henry Ford,” *Washington Post*, 31 May 1924, 6.

<sup>141</sup> Worthington to Hill, 5 November 1924, 32:5, Hill Papers, Hoole.

<sup>142</sup> “Ford Withdrawing Muscle Shoals Bid,” *New York Times*, 14 October 1924, 1.

debated the relative merits of private and public operation, as well as the potential for development under various parties. He grew increasingly irritated as Alabama Power held on to the Gorgas steam plant even as it submitted a rival bid for the properties. By 1924, Ford realized the fight was hopeless and withdrew. Lister Hill perhaps best interpreted Ford's defeat: "[He] is tired of all the long delay, and of the bitter politics, and ... he has doubtless found some other way to do the things he wanted to do at Muscle Shoals."<sup>143</sup>

At first, some of Ford's most ardent supporters refused to give up hope. President Coolidge supported the private leasing of the Muscle Shoals properties, and he publicly stated that he hoped Ford would "renew his interest in the property" if Congress could decide on a specific plan to dispose of the properties to a private interest.<sup>144</sup> Oscar Underwood introduced a bill into the Senate, hoping to entice Ford to rethink his withdrawal. The bill opened the possibility of selling surplus power after fertilizer production and reserved power for the use in any factories Ford chose to locate in the region.<sup>145</sup> The modifications fell flat. Ford refused to fight for Muscle Shoals, and Alabamians soon turned to other alternatives. In later recollections, he noted how "shameful" the political nature of Muscle Shoals had become after promising so much for industry, agriculture, and national defense.<sup>146</sup> His associates felt relieved, and one called the end of the Muscle Shoals a "godsend."<sup>147</sup> Most southerners did agree with that conclusion. In three years, Ford had kindled the hopes of the Tennessee Valley with visions of

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<sup>143</sup> Hill to Joseph H. Lyons, 17 October 1924, 32:5, Hill Papers, Hoole.

<sup>144</sup> "President Invites Future Action by Ford for Shoals," *Washington Post*, 19 October 1924, 9.

<sup>145</sup> "The Senate Off the Shoals," *New York Times*, 15 January 1925, 20; and "Shoals Bill Changed to Attract Ford," *New York Times*, 6 February 1925, 3.

<sup>146</sup> Crowther and Ford, *Today and Tomorrow*, 169.

<sup>147</sup> Nevins and Hill, *Ford*, 311.

vast fields of cotton, skylines of factories, and ample employment. When he left, expectations fell dramatically as the people of Muscle Shoals prepared themselves for a much longer fight.

Yet despite the continued stalemate, the Tennessee Valley had been given a valuable lesson in the ways and means of economic growth. In 1916, the proponents of development at Muscle Shoals were sure of the benefits that would come from the nitrate plants and hydroelectric dam. Cheap water power would flow into government-operated nitrate plants, resulting in inexpensive, widely available, and highly effective fertilizer that would then be used regional farmers struggling to grow cotton in spent soil. Other Alabamians, particularly in the city of Florence, looked beyond the immediate uses of the plants towards community and industrial development. Henry Ford's offer spoke to both groups. The industrialist promised to turn his innovative methods to the production of fertilizer, elating the struggling farmers of the Tennessee Valley. In turn, the farm bloc threw its support to Ford, hoping that his fertilizer would revitalize cotton agriculture. City leaders hoped that Ford's know-how would bring industrial development as the nitrate plants hired workers and the cheap electricity attracted associated concerns. Ford's reputation fit their expectations and his public statements hinted at prosperity based on a combination of agriculture and industry. This was enough for local businessmen, who hoped that the manufacturer's agricultural-industrial utopia would bring prosperity to field and factory alike.

Ford's chief rival also valued industrial growth. Alabama Power's leaders realized that agriculture provided no sure future for their state and no foundation for their own expansion. Instead, only diversified development, focused specifically on additional industries, could ensure renewed prosperity. The utility saw the government reservation at Muscle Shoals, particularly the hydroelectric potential of Wilson Dam, as the key to regional revitalization. Power from the

dam would enter Alabama Power's statewide grid, where it could be used to encourage industrial growth wherever needed. The utility's leaders scoffed at Ford's lofty promises, afraid that such a localized focus would waste the potential at the Shoals. Yet even as the utility took concrete steps to bring in new industries throughout the state and the South, Alabama Power faced public recrimination. The company fended off charges that it sought a monopoly on water power and planned to prevent the farmers of the region from getting the fertilizer they needed. Alabama Power became the villain with a popular opponent whose rosy picture of the future proved tough to beat.

In the end, Ford's defeat came not at the hands of the private utility, but with the persistent opposition of George Norris. Afraid that a lease to any private concern might waste an important national resource, Norris proposed continued public ownership and operation of the facilities at Muscle Shoals. The government could provide farmers with much needed fertilizer and could electrify communities throughout the Valley, all while ensuring that the benefits of the dam and plants spread to as many as possible. Even as support for Ford built in the House of Representatives and across the Tennessee Valley, Norris's Senate Agricultural Committee rejected every private lease for the plants. After Ford's withdrawal, Norris continued to dominate the Senate, forcing Alabamians to compromise in order to have the plants operated. In the decade leading up to the creation of the Tennessee Valley Authority in 1933, Norris pushed two bills through Congress and saw a number of compromises emerge from the House, even though it was dominated by the supporters of private leasing. In Ford's defeat, Alabama's delegation learned to blend their desires for fertilizer production and plant utilization with legislation that acknowledged the possibility of public ownership. If North Alabamians wanted

government-funded economic development, they would have to work with federal officials, even those with radically different plans for their region.

The issues that arose during the initial stage of debate of Muscle Shoals never faded. In fact, aspects of the fight between Ford and Alabama Power in the early 1920s reverberated throughout the South's transition from an economy based largely on cotton monoculture to one focused on industrial development. Even as the cotton plantation era drew to a close, farmers held to the hope that limited support for manufacturing, particularly in the area of agricultural technology, might preserve profitable cultivation. This concession provided room for agreement with their neighbors in town. Across the Valley, however, business leaders had begun to look beyond the farm. Civic groups began sponsoring efforts to attract industry to the South, hoping to employ out-of-work farmers, increase local revenue, and provide a foundation for future prosperity. Hesitant to support the growth of a perceived monopoly, businessmen in North Alabama refused to cooperate with Alabama Power, even as the private utility shared their desire for a diversified economy and had begun working toward that goal. The Tennessee Valley Authority eventually drove Alabama Power from North Alabama, but the call for industrial development remained. Community groups in the Valley's population centers, cities such as Florence, Decatur, Huntsville, and Guntersville, continued their work to bring industry to the South. They worked closely with the government, first with TVA, then with the various defense agencies that emerged during World War II and the Cold War, to attract federal investments that could bring even more business to the region. Norris and his colleagues may have prevented the leasing of Muscle Shoals, but he failed to stem the desire for industrial development. Instead, his intransigence taught Alabamians a valuable lesson: economic development required cooperation. As the United States experienced depression, war, boom, and bust, echoes of Muscle Shoals

continued to resound in the halls of Congress, in courthouses and offices in far-flung Valley communities, and in homes and farms across the South.

## CHAPTER 2

### “All They Want Is to Have the Plants Operated”: Muscle Shoals, 1924-1933

If we should properly develop this project, we would tap this lightning that man has called electricity and convert its destructive and ruthless forces into a friendly power that would turn the countless wheels of toil all through the South and bring happiness and comfort to thousands of humble homes.<sup>1</sup>

Months after excoriating Alabama Power for working to undermine Henry Ford’s bid for the facilities at Muscle Shoals, the *Florence Times* ran a surprising editorial. The paper praised the utility for its “evidences of good faith and cooperation toward working together in harmony.” As the local electric company, the paper noted, Alabama Power undoubtedly benefited as the region grew and expanded its economic opportunities (and thus, wanted to remain the sole power distributor for the Muscle Shoals District), and the *Times* promised that “the people of this section will join with them in the endeavor to bring about the complete development of this section.” Florence’s leaders were ready to forgive and forget in the interest of greater economic opportunity: “The hatchet has been buried.”<sup>2</sup> The reversal was remarkably abrupt and relatively surprising. The *Times* had been one of the most vocal critics of the utility company, even before Ford’s offer went public, and the paper had voiced the sentiments of thousands in the Muscle Shoals District who feared that Congress would approve Alabama Power’s bid and allow the

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<sup>1</sup> Title from Robert Talley, “Talley Calls Big Nitrate Plant Here a Large ‘Beehive without any Bees,’” *Florence Times*, 23 November 1928, 1, 8. Introductory quote from George Norris in *Congressional Record* (Senate), 69<sup>th</sup> Cong., 1<sup>st</sup> sess., 1926, 67, pt. 5: 5213.

<sup>2</sup> Untitled editorial, *Florence Times*, 12 December 1924, 2.

utility to begin transmitting power to surrounding states without producing the fertilizer that had caused Alabamians to support the project initially.

In retrospect, the paper's shift is more understandable. In 1921, with work slowing on the dam and the nitrate plants inactive, Ford's bid revitalized hope for the project's future, encouraging some to see beyond fertilizer to the larger development of the Tennessee Valley. Yet in 1924, when Ford withdrew his bid after years of congressional infighting, the project again seemed endangered. Alabama Power was the only major bidder left for the facilities. For the city's leadership, concerned as they were for the continued growth and prosperity of the area, the private utility seemed the only entity willing to operate the plants and dam at Muscle Shoals. Florence's transformation from "Ford country" to "Alabama Power country" was short-lived – as other bids rose to prominence, the city's leaders transferred their allegiance away from the utility. However, the ease with which Florence's citizenry flocked to Alabama Power speaks to the similarity of their visions for the Valley. Both hoped to put Alabamians to work in new factories, drawn to the region by water power from the Tennessee River. Alabama Power stressed regional development, and while Tri-Cities leaders feared the utility might ignore North Alabama in favor of statewide profits, they considered compromise if it meant the reactivation of Muscle Shoals.

This nascent relationship between the Tri-Cities and Alabama Power never matured into full-blown cooperation, but in the wake of Ford's withdrawal, local leaders proved willing to embrace new directions if it meant a chance for greater development in Valley communities. As the fight for Muscle Shoals entered its second stage, concerned parties turned to compromise. Ford brought a unifying force to the region, with an appeal that encompassed both farmers, who hoped to use the plants as a means of remaining in agriculture, and community leaders, who

hoped that the industrialist would create a localized economic renaissance for town and farm alike. Without Ford, the future of Muscle Shoals was less certain. Farmers refused to surrender fertilizer production at the nitrate plants, but in Florence at least, some citizens refocused their attention on the need for operation regardless of which party turned the wheels – economic expediency made for strange bedfellows. As other bids emerged to create fertilizer and restart the nitrate plants, city leaders again rejected a perceived power monopoly in favor of local development. Tri-Cities leaders would compromise if, in the end, the utilization of Muscle Shoals could be turned to community development. As George Norris and the forces of government operation entered the political ascendancy in the late 1920s, they found an unlikely audience in the towns of North Alabama, interested above all in a new, prosperous southern economy. Such an end justified even the unlikeliest of means.

This second stage of the debate over Muscle Shoals, beginning with Ford's withdrawal in 1924 and ending with the creation of the TVA in 1933, was marked by the transition from widespread calls for private ownership to a general acceptance of operation by the federal government. Undoubtedly, the key figure in this transition was George Norris, the Nebraska Republican senator whose work for the public conservation of natural resources came to encompass Wilson Dam and the accompanying nitrate plants. Norris grew to dominate the U.S. Senate in the late 1920s, but he did not single-handedly give Muscle Shoals to the federal government. Instead, he found Alabamians, both in the halls of Congress and on the streets of Florence, willing to work with him to operate the facilities. At the local level, both farmers and businessmen came to see the benefit of government operation. Florence's leaders continued to call for private ownership if it proved viable, but they also supported government operation, especially as they realized that Norris's interest in resource development fit with their own

nascent program of community growth. In nearby farms, the agricultural community had long called for the private manufacture of fertilizer at Muscle Shoals as a means of buttressing the region's failing farm economy. Farmers were hesitant to support Norris's crusade, but as the senator proved willing to discuss dedicating the plants to fertilizer production, farmers found themselves tentatively optimistic, knowing that their needs would finally be met.

Alabama's congressional leaders were the hardest group to convince, but by the late 1920s, they, too, found themselves working with Norris to activate Muscle Shoals. Even as late as 1930, that transformation was not complete, but Hugo Black, Lister Hill, and Edward Almon all reached across ideological lines to compromise with the forces of government operation, willing to abandon their insistence on private operation as long as legislation could be passed to fund the operation of the nitrate plants and dam. In 1932, Franklin Roosevelt's election made government operation of Muscle Shoals a foregone conclusion; the incoming president-elect personally credited George Norris, referring to him as the "Father of the TVA." While Norris did expend an enormous amount of political capital to secure government operation of the North Alabama facilities, he enjoyed increasing support from the region, thanks largely to the spirit of compromise. As Norris acknowledged the demand for guaranteed fertilizer production, he found his enemies willing to discuss the possibility of government ownership and operation. From the cities and fields of North Alabama to Washington, D.C., the possibility of development along the Tennessee River proved much stronger than the ideology of economic progress.

In the immediate aftermath of Henry Ford's withdrawal, however, private operation of the plants seemed to provide the best opportunity for progress on the project. Two months after Ford officially revoked his bid, Oscar Underwood introduced a bill in the Senate that allowed the secretary of war to execute a lease of the Muscle Shoals properties to a private company based

on a guarantee of fertilizer production. He then added a clause that called for government operation only if no suitable private corporation could be found.<sup>3</sup> The bill contained the seeds of a possible compromise with Senator Norris and those in favor of government operation, but the Alabama delegation saw the inclusion of the clause as an abdication of the vision unleashed by Ford. Senator Thomas Heflin promised that government operation would be the “final blow” to the manufacture of fertilizer at Muscle Shoals, since President Calvin Coolidge was clear in his opposition to government competition with private business, and he praised Underwood’s bill as an opportunity for private manufacture of fertilizer similar to that presented by Ford, with the added bonus that it could pass the president’s desk.<sup>4</sup>

Underwood’s bill faced a “spectacular parliamentary battle” in Congress between competing bills for private and government operation.<sup>5</sup> However, riding the wave of public support for Ford’s bid, Underwood’s bill passed the Senate and landed in the House Military Affairs Committee. There, congressmen adjusted the deadline for leasing, set limits on fertilizer profits, and reduced price limits on plant food produced at Muscle Shoals, but the basics of the bill stood: the president would authorize a lease to an American individual or company that would ensure the production of nitrates in wartime and fertilizer in peacetime. The fertilizer would be given to farmers, and the government would agree to construct Dam 3, which would boost production and allow the government to sell the excess power to the region.<sup>6</sup> Underwood’s bill embodied the basic requirements needed to gain the support of Alabama’s farmers. Even

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<sup>3</sup> Underwood, S3057, 2 December 1924, 68<sup>th</sup> Cong., 2<sup>nd</sup> sess., in 44:5, Underwood Papers, ADAH.

<sup>4</sup> *Congressional Record* (Senate), 68<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1924, 66, pt. 1: 652-3. In fact, Coolidge’s support for a private bid inspired Underwood’s legislation. See Evans, *Oscar W. Underwood*, 356-7.

<sup>5</sup> Judson King, “A Brief Chronology of Muscle Shoals Legislation,” 24 December 1933, 4: “010.12 Muscle Shoals Bibliography,” Lilienthal Correspondence Files, TVA Records, NARASE.

<sup>6</sup> *Congressional Record* (Senate), 68<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1925, 66, pt. 5: 4708-10; *Congressional Record* (Senate), 69<sup>th</sup> Cong., 1<sup>st</sup> sess., 1925, 67, pt. 1: 363.

without Ford, the Alabama delegation called for the private development of Muscle Shoals with a focus on fertilizer production. Hydroelectric power was a secondary concern, to be considered only after the nitrate-producing plant received as much electricity as it needed. Even without Ford's promises, the key to development for many Alabamians remained the promise of agricultural revitalization.

Yet even as Underwood tried to keep Muscle Shoals dedicated to the production of nitrates for fertilizer that would assist local farmers, Alabama Power's leadership found itself perfectly positioned to demonstrate its ability to use the power produced at Wilson Dam for the benefit of the entire Southeast. Despite the slowdown in work in the early 1920s, construction on the dam continued, and in 1925, the government prepared to test the turbines. In order to evaluate power production, Washington needed specialized power equipment, such as transformers, conductors, insulators, and transmission lines, as well as technical personnel to measure the outcomes. The War Department entered discussions with Alabama Power, the only utility company with equipment in the region, and the utility agreed to cooperate by building a temporary transformer and providing all of the necessary equipment for the initial run.

Furthermore, Alabama Power purchased all of the power generated during the test, paying the government in monthly installments. The War Department retained complete control of the switch and gave no guarantees to production, but Alabama Power was the only bidder. On August 21, 1925, a small auxiliary turbine began turning in the first generating unit. The engineers did not push the dam to its capacity, only running half of the available electrical units, but within a month, hydroelectric power flowed along the Alabama Power transmission lines running from Wilson Dam.<sup>7</sup> With a monopoly on the test power, the utility's offer seemed a *fait*

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<sup>7</sup> O.G. Thurlow, Vice President in Charge of Engineering, Alabama Power, to Major M.C. Tyler, 18 June 1925; and Major General H. Taylor, Chief of Engineers, War Department, to Alabama Power, 23 June 1925, 41: "095,

*accompli*. The company not only had the experience of serving utility customers in the region, it also had the beginnings of the infrastructure needed to reap more widespread benefits from the project. Yet the offer did not provide for the utilization of the nitrate plants, and the test period agreement did little to assuage fears that Alabama Power wanted only the power produced at the dam. Without specific fertilizer guarantees like those included in Underwood's bill and Ford's proposal, agricultural development seemed a secondary concern at best.

In 1925, Florence's leadership cautiously began to cooperate with Alabama Power in the development of the city. Disappointed with the failure of the Ford offer and increasingly unwilling to rely on the government to move more quickly, the city looked to the utility to help boost its economic fortunes. In January 1925, Alabama Power purchased the old Sheffield Company, officially adding the Tri-Cities to its distribution network. In a statement on the occasion, President Thomas Martin promised to develop the region's resources, to make power widely available, and to begin working immediately for industrial development.<sup>8</sup> In March 1925, Alabama Power met with the Florence Chamber of Commerce and promised them an "unlimited amount" of power to meet the demands of industries that might want to locate in the city. By June, the city had three definite prospects (a fiber mill, a knitting mill, and a cotton mill) and its leaders looked to purchase and list factory sites as incentives, even encouraging citizens to donate their own land and invest in stock in the companies.<sup>9</sup>

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Alabama Power Co., thru June 1934," David E. Lilienthal Correspondence, NARASE; "To Generate Wilson Dam Power Today," *Florence Times*, 21 August 1925, 1.

<sup>8</sup> "Company Acquires Tri-Cities Property," *Powergrams* V:9 (January 1925), 3-5, in Alabama Power Corporate Archives.

<sup>9</sup> "Unlimited Amount of Power Assured District Officers of Alabama Power Companies Say," *Florence Times*, 6 March 1925; Untitled Editorial, *Florence Times*, 5 June 1925, 2; and "Factories Seeking Location in Florence," *Florence Times*, 12 June 1925, 1.

The utility undoubtedly gained the city's confidence with its fledgling New Industries Division. In 1922, the office began with one man, T.D. "Tom" Johnson, working to create an industrial recruitment program as a way to expand the utility's customer base. In 1924, he realized his first success with Opelika's Pepperell Manufacturing, the first of a series of New England cotton mills approached by Johnson. The next year, Alabama Power won three more industries, all cotton mills located in North Alabama.<sup>10</sup> Johnson provided concrete evidence that his utility company would actively work to improve the economy of its customers.

Yet Alabama Power did more than just talk with interested industries – the utility also created a foundation for further growth. As Florence prepared to advertise itself to the business world, the utility donated \$2,500 to the chamber of commerce to help offset the cost of a Boston Engineering firm's study of the region's available resources. Completed in November, the survey described Florence as suitable for twenty-four kinds of industries (mostly raw material processing, though the list also included some chemical and metallurgical manufacturers) and noted the importance of Florence's access to electricity, water, and its employable population. Power, however, was the key. As one chamber of commerce official stressed, "MUSCLE SHOALS signifies Power ... [For] Florence to profit by Muscle Shoals [it] must create a power market."<sup>11</sup> Electric service made the city attractive to prospective industries. The city did not forget the surrounding cotton fields, and as more bids emerged for the operation of the nitrate plants, Florence added its support to any plan viable enough to produce results. However, as city

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<sup>10</sup> Johnson, "The New Industries Division of Alabama Power Company: Its Purpose and Functions," [ca. 1941-2], in Folder 5.1.1.98.237, Alabama Power Corporate Archives; and Alabama Power, "New Industries Located in Service Area, 1925-1957, Inclusive," 9 April 1953, in Folder 5.1.1.98.241, Alabama Power Corporate Archives.

<sup>11</sup> "Power Company Makes Gift of Generous Amount toward Cost of Industrial Survey," *Florence Times*, 7 August 1925, 1; "Barnwell Presents Report of Industrial Survey for Florence to Directors," *Florence Times*, 6 November 1925, 1; "Industrial Survey Creates Real Foundation for Great Development to Occur Here," *Florence Times*, 20 November 1925, 1, 7.

leaders began looking towards the future, they expressed a very different vision of development than their rural neighbors and their congressional constituency.

As Alabama Power worked to build support in Florence, the Coolidge Administration sought to end the confusion surrounding Muscle Shoals. In March 1925, the president appointed a five-man commission to determine the best method for utilizing the properties at Muscle Shoals. The commission engendered immediate skepticism among the pro-government crowd, particularly Senator George Norris, who claimed he had “no faith” in the eventual findings. On numerous occasions, Coolidge made his own support for private operation public knowledge, and he appointed John C. McKenzie, the Chairman of the House Military Affairs Committee who had introduced legislation to accept Ford’s offer, to head the committee.<sup>12</sup> For the supporters of private operation, however, the Coolidge Commission was an important step towards a lease. The presidential committee lent bipartisan authority to the arguments of southern Democratic congressmen like Underwood and Heflin who had called for private operation of the project.

The findings fit well with Coolidge’s own fiscal conservatism. As historian John D. Hicks noted, Coolidge believed that “the business of government ... was to help business in every possible way.”<sup>13</sup> In authorizing a private lease for the plants, the commission was providing just such assistance. Just as important, the commission convinced many that a solution existed to the question of Muscle Shoals, as long as Coolidge’s appointees could come to an agreement on the nature of private operation. In a letter to Underwood, the longtime lobbyist for the development of Tennessee Valley, J.W. Worthington, noted that a strong resolution from the

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<sup>12</sup> King, “A Brief Chronology of Muscle Shoals Legislation,” 24 December 1933, in Box 4: “010.12 Muscle Shoals Bibliography,” David E. Lilienthal Correspondence, TVA Records, NARASE; “Norris Ridicules Shoals Commission,” *New York Times*, 2 April 1925, 23.

<sup>13</sup> John D. Hicks, *Republican Ascendancy, 1921-3* (New York: Harper and Row, 1960), 81.

commission would allow him to find a definite leasing plan among some “promising” candidates.<sup>14</sup>

In November, two months after Alabama Power began purchasing power from Wilson Dam on a temporary basis, Coolidge’s commission reached a verdict. While not unanimous, the findings were fairly conclusive. The majority favored a private lease of the Muscle Shoals properties, but if a private lease proved impossible, then the report allowed for government operation. The conclusions largely matched the broader implications of Underwood’s leasing bill, with its preference for private operation but allowance for government operation in an emergency. The minority report was even more explicit, stating its opposition to government operation in any case whatsoever.<sup>15</sup> Coolidge elicited a strong statement in favor of private operation and provided additional encouragement to the bidding war for Muscle Shoals, even as one of the strongest candidates, Alabama Power, began pressing its own case at the local level for a larger part in regional development.

In the midst of the Coolidge Commission’s discussions over the future of Muscle Shoals, Alabama Power restated its interest in the project. In a letter to Chairman McKenzie, Alabama Power’s president, Thomas W. Martin, emphasized the utility’s ability to put the facilities to use. He promised that his company would follow the original intent of the 1916 National Defense Act; Martin called for government operation of the plant during wartime, immediate commercial production of fertilizer, and power generation that utilized the running waters of the Tennessee River. Going somewhat farther than his earlier attempts at obtaining the facilities, Martin suggested that Alabama Power had already done some preliminary work in fertilizer production and could quickly begin making the product at the second plant while working to update the first.

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<sup>14</sup> Worthington to Underwood, 23 July 1925, in Box 40:4, Underwood Papers, ADAH.

<sup>15</sup> “Commission Split on Muscle Shoals,” *New York Times*, 3 November 1925, 44.

Martin planned to combine with Tennessee Electric Power Company and Memphis Power and Light to operate the power plant, and then join with experienced fertilizer producers to create a second corporation to operate the fertilizer plants. Alabama Power also proposed a lease of Dam 3 as soon as it was constructed by the government. Despite his promise to consider fertilizer production, Martin made clear that his role in the development of the Tennessee Valley centered on power: “The power companies in this region are in the position to finance and develop power to meet the market demand.” The region would never get industry until a permanent power solution could be reached.<sup>16</sup> Alabama Power’s immediate goal was to show that a viable lease for the facilities could be found, thus justifying support for private operation. When the committee gave its report, the power companies’ bid was one of the first submitted.

Coolidge knew that his committee’s findings would incite a flurry of bidding, and in a December 1925 message to Congress, the president called for a “small joint committee” of Congressmen from both houses to vet incoming bids. For Coolidge, the nine-year debate had proven the inability of the federal government to “deal directly with an industrial and commercial problem” and he reasserted his call for private operation for fertilizer production with power a secondary concern.<sup>17</sup> In March, Congress approved the committee, which included three members each from the Senate Agricultural Committee (including Alabama’s Thomas Heflin) and the House Military Affairs Committee.<sup>18</sup> The group received ten offers for the power and nitrate project, but those from the power companies, Union Carbide, and American

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<sup>16</sup> Martin to McKenzie, 27 October 1925, 40:4, Underwood Papers, ADAH.

<sup>17</sup> “President Asks Congress to Preserve Economy Program,” *Washington Post*, 9 December 1925, 10.

<sup>18</sup> “Senate Passes Muscle Shoals Measure, 51-26,” *Washington Post*, 9 March 1926, 1; and “Joint Committee Named to Receive Bids,” *Florence Times*, 14 March 1926, 1, 2.

Cyanamid appeared the strongest contenders.<sup>19</sup> The news buoyed the region, especially the bid from American Cyanamid, since fertilizer production seemed to be inching closer to reality.

In mid-April, Senator Charles S. Deneen of Illinois read the committee's majority report. Four of the six members backed the offer of the southern power companies, including Alabama Power. In their bid, the utilities promised to operate the power facilities as the Muscle Shoals Power Distributing Company and to run the nitrate plants as the Muscle Shoals Fertilizer Company. The power group assured Congress that it would give the fertilizer company as much electricity as needed to operate and limited profits to 8%, the same self-imposed ceiling as in the Ford offer.<sup>20</sup> The utilities were certainly persistent, and the offer was impressive. Alabama Power already drew electricity from Wilson Dam and the company's constant dialogue with congressmen and the War Department provided the insight needed to craft a bid that met the public demand for fertilizer while benefiting from the great hydroelectric potential from the dam. The company had the added bonus of the backing of the Joint Congressional Committee, which itself was instructed by the president to find a workable solution and have it quickly enacted.

Despite its promising position, the power companies' offer faced some serious obstacles. Representative Frank James of Michigan refused to vote for the utilities and issued a minority report, calling the offer "a power proposition disguised as a fertilizer proposal."<sup>21</sup> James went further, accusing Alabama Power of seeking to make a profit at the expense of the federal government. James cited the opposition to Alabama Power by farmers' groups like the American Farm Bureau as proof of the company's unwillingness to truly help farmers. In its offer, he argued, Alabama Power was simply trying to get the power at Wilson Dam while

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<sup>19</sup> "Ford May Submit Shoals Offer to Coolidge," *Florence Times*, 11 April 1926, 1.

<sup>20</sup> Bill S4106, Deneen, 69<sup>th</sup> Congress, 1<sup>st</sup> Session, 19 April 1926, 45:1, Underwood Papers, ADAH.

<sup>21</sup> James, Minority Report to Accompany HR 11602, 69<sup>th</sup> Cong., 1<sup>st</sup> sess., 26 April 1926, 1.

investing as little money as possible in fertilizer research.<sup>22</sup> The other minority vote belonged to Heflin, who supported the bid of American Cyanamid under its parent company, the Air Nitrates Corporation. The Senator sent a telegram to the people of the Tennessee Valley, encouraging them to fight the offer of Alabama Power. He found an audience predisposed to oppose the private utilities. At a mass meeting in Florence, the assembled citizens called on Heflin to “protect our happiness and our future prosperity” by remembering the farmers and their need for fertilizer.<sup>23</sup> With an alternative possibility for the operation of the plants and dam at Muscle Shoals, Florence quickly retreated from its willingness to cooperate with Alabama Power.

Once again, the private utility was portrayed as an enemy. With a plan focusing specifically on electric generation instead of fertilizer, the utilities’ offer seemed self-serving. The *Florence Times*, sensing a worsening sentiment towards the utility, began listing the faults in the power bid, going so far as to suggest that government ownership might prove to be the only alternative to “being made the victims of a shrewd, voracious and domineering organization.”<sup>24</sup> This hardly seemed the same utility that had done so much to prepare Florence for industrial development. Alabama Power found fighting its negative image difficult, especially with the waves of support for American Cyanamid Company’s bid coming from farmers’ organizations and civic groups. O.G. Thurlow, the president of the Muscle Shoals Fertilizer Company (the power companies’ fertilizer wing) wrote a lengthy letter to President Sam Thompson of the American Farm Bureau pleading his case and directly comparing the two bids. He characterized his company’s offer as another step in the utilities’ continuing efforts to improve the region and

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<sup>22</sup> *Ibid.*, 4, 7-8, 23.

<sup>23</sup> “Majority Accepts Power Companies Offer,” *Florence Times*, 26 April 1926, 1; and “Mass Meeting Demands Power Co. Defeat,” *Florence Times*, 1, 2.

<sup>24</sup> “An Editorial,” *Florence Times*, 2 May 1926, 1.

insisted that the bid included the same fertilizer promises that had made Ford's lease so popular. The utilities promised to distribute any surplus power throughout the South, even going so far as to incorporate other dams and plants as they were built. Thurlow noted the irony in the public criticism of Alabama Power for attempting to use Muscle Shoals for its own gain when the nitrate companies would also profit from production at the facility.<sup>25</sup>

The utilities' supporters in Washington also came to their defense. Deneen reiterated his committee's support of the power companies' offer, stating that it provided for guarantees on the use of the plants for fertilizer and defense while also providing the largest monetary return to the government. The committee was also impressed by the power companies' promise to distribute power regionally by means of a larger plan for the development of the Tennessee watershed. American Cyanamid's plans were nowhere near as extensive, and in Deneen's opinion, even their fertilizer propositions fell short of the power companies' own guarantees.<sup>26</sup> The private utilities certainly had a specific plan for the development of the Tennessee Valley. Their offer met the stringent demands of those calling for fertilizer for agricultural development, a requirement extending back to the beginning of the Muscle Shoals project. Yet the company also looked beyond farming, planning a larger distribution of power that would provide a more diversified development of industry and agriculture across the region. Despite the comprehensive nature of their program, the power companies could not overcome the charges that their power plans superseded their fertilizer guarantees.

The bid by the American Cyanamid Company became the darling of most southerners, thanks in part to the work of the farmers' organizations, which saw it as the greatest hope for

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<sup>25</sup> Thurlow to Thompson, 14 September 1926, SG21313:19, William G. Brandon Administration Papers [Brandon Papers], ADAH.

<sup>26</sup> *Congressional Record* (Senate), 69<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1926, 68, pt. 1: 354-7.

more widely available, more affordable plant food. In a head-to-head analysis between American Cyanamid and Alabama Power, the nitrate company's bid did provide more hope for the successful activation of the plants at Muscle Shoals. American Cyanamid had proven its ability to produce nitrates, while any fertilizer production by power companies would be necessarily experimental in nature. Because many of the processes used in nitrate production at the plants were created by American Cyanamid's technicians, the offer also bypassed many of the patents and royalties that might tie up the power companies. According to an analysis prepared for Underwood, the power companies' bid proved superior in only a few respects, namely the willingness to produce more initial fertilizer if the product went unsold and plans to build extra units even without additional hydroelectric dams constructed downriver. Admittedly, the power companies would use the surplus power to build up industries around Muscle Shoals and in nearby communities and states, but the nitrate company would more likely use extra power to support industry in the Shoals area, and by cheapening fertilizer, provide a greater overall return to the region's farmers.<sup>27</sup>

Alabama's delegation extolled the benefits of the Cyanamid bid in Washington. On the Senate floor, Heflin used farmer support for the bid to back his own claim that the American Cyanamid Company would best utilize the facilities.<sup>28</sup> Underwood also praised the Cyanamid bid, stating that the nitrate company would better fulfill the original intent of the National Defense Act by focusing on nitrate production and using hydroelectricity to power the plants.<sup>29</sup> Representative Edward Almon stated his support for American Cyanamid while criticizing the

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<sup>27</sup> "Muscle Shoals, Comparison of Revised Bids of Air Nitrates Corporation and of Muscle Shoals Distributing Company and Muscle Shoals Fertilizer Company," [ca. 1926], 45:2, Underwood Papers, ADAH.

<sup>28</sup> *Congressional Record* (Senate), 69<sup>th</sup> Cong., 1<sup>st</sup> sess., 1926, 67, pt. 5: 5082.

<sup>29</sup> Underwood's statement of support was included in the *Congressional Record* by W.B. Oliver. See *Congressional Record* (House), 69<sup>th</sup> Cong., 1<sup>st</sup> sess., 1926, 67, pt. 9: 10245.

bid of the power companies. He noted that the Joint Committee's recommendation came under "widespread protest and disapproval" and with hollow claims and flimsy guarantees for fertilizer. In Almon's view, the Cyanamid bid most resembled the offer of Henry Ford.<sup>30</sup> J.W. Worthington began lobbying hard for the bid, gaining support among unnamed New England Congressmen and asking Lister Hill to help convince other colleagues to get behind the offer. His work drew criticism in several papers, but Worthington was sure of victory in the end: "The pig is pinched and he is squealing – we have stuck him in a sore sport and he is bleeding, and I am going to do my best to bleed him to death – I will never stanch a drop."<sup>31</sup> He told Underwood that he "drove the power companies off of the New England lot" and pushed to have the Farm Bureau back the Cyanamid offer, all amidst rampant power company propaganda against his Tennessee River Improvement Association.<sup>32</sup> With Worthington's help and growing congressional support for the Cyanamid bid, momentum shifted away from the power companies.

The Cyanamid bid fit easily into the political divisions of early twentieth-century Alabama. The 1920s marked the height of one-party rule across the South. Even in North Alabama, a source of traditional opposition to the state's Black Belt rule, the Democratic Party was the only viable option in local, state, and national elections. However, every southern Democrat was not created equally, and as V.O. Key famously noted in his seminal study of the politics of the South, within the one-party system, voters chose between a number of factions and idiosyncratic candidates expressing the "contempt for authority" and "spirit of rebellion" that

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<sup>30</sup> *Congressional Record* (House), 69<sup>th</sup> Cong., 1<sup>st</sup> sess., 1926, 67, pt. 11: 11693-4.

<sup>31</sup> Worthington to Hill, 21 July 1926; and Worthington to Hill, 21 September 1926, 32:18, Hill Papers, Hoole.

<sup>32</sup> Worthington to Underwood, 14 December 1926, 45:2, Underwood Papers, ADAH.

Key saw in Alabama's government.<sup>33</sup> He believed that the state exhibited a progressive-conservative "cleavage," a holdover from the Populist revolt of the 1890s, which persisted in the ongoing power struggle between the "big mules," a coalition of Birmingham industrialists and Black Belt planters, and what later political scientists would call the "branch heads" – the farmers and workers who seemed to exist only to make the big mules wealthier. North Alabama, a center of progressive opposition to the continued reign of the big mules, naturally sought to prevent the wholesale surrender of its natural wealth to Alabama Power, whose investors and owners were the epitome of the conservative elites.

Key's analysis also speaks to the importance of lobbying groups in state politics. Alabama's Democratic factions proved fairly illusory, emerging around idiosyncratic politicians in any given election, only to melt away when new issues emerged. As such, candidates needed proven vote-getting machines, organized at the community level, in order to mobilize the masses. In Alabama, two of the most important such groups were the State Agricultural Extension Service and the Alabama Farm Bureau Federation. The Extension Service and Farm Bureau were particularly effective in mobilizing voters for specific issues, particularly those affecting farmers.<sup>34</sup> At Muscle Shoals, the Farm Bureau effectively pressured congressional representatives to support both the Ford and the American Cyanamid offers while engendering opposition to Alabama Power.

In January 1927, the support for the Cyanamid bid culminated in the Madden Bill, named for Illinois Republican Martin Madden, which called for the acceptance of the lease of the Muscle Shoals properties to American Cyanamid. After receiving the bill, the Military Affairs

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<sup>33</sup> V.O. Key, Jr., *Southern Politics in State and Nation* (New York: Vintage Books, 1949), 36-7, 39. Though conducted in the 1940s, Key's investigation into Alabama's political system can be applied across the early twentieth century.

<sup>34</sup> *Ibid.*, 55-6.

Committee drew up a list of five requirements for a successful bid. To receive serious consideration, an offer had to make Muscle Shoals available for military purposes, produce fertilizer during peacetime, lease all of the properties as a unit, strictly regulate nitrate production, and agree to forfeit the lease if less than 40,000 tons of nitrates were produced within a year. In a blow to the hopes of private operation, the committee decided that none of the bids met the necessary requirements. The committee called for revised bids and stated that if no satisfactory bids were found, it would consider government operation.<sup>35</sup> The Madden Bill was by no means the last call for the private operation of the Muscle Shoals facilities; however, it was the last real legislative chance for a private company to control the project.<sup>36</sup> After March 1927, supporters of private operation began including clauses for government operation in their bills to lease the plants and dam. The late 1920s also saw the growing strength of George Norris, who consistently guided government operation legislation through the Senate. Despite the hard work of Worthington, Heflin, and Underwood, the future of Muscle Shoals increasingly seemed to involve compromise and sacrifice.

In December 1924, while Underwood worked to pass legislation that would ensure private operation of the plants, Norris lambasted his supporters in the Senate. Underwood and President Coolidge were sending the “ship of state ... straight for Wall Street [with] a deed of conveyance to the electric water power trust of America for one of the greatest inheritances of unborn generations of American citizens.”<sup>37</sup> Electric rates in Alabama were much higher than

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<sup>35</sup> Judson King, “A Brief Chronology of Muscle Shoals Legislation,” 24 December 1933, 6-7, in Box 4: “010.12 Muscle Shoals Bibliography,” Lilienthal Correspondence, TVA Records, NARASE.

<sup>36</sup> Preston Hubbard comes to a similar conclusion. See Hubbard, *Origins*, 215.

<sup>37</sup> *Congressional Record* (Senate), 68<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1924, 66, pt. 1: 703.

those in Cleveland, Ohio, and Lincoln, Nebraska, where municipalities owned their own plants and distributed electricity. The senator drove home his antipathy to the trusts he believed were trying to take Muscle Shoals. He included a table in the *Congressional Record* showing the interconnected business ties between power companies from Alabama and utilities across the country, including Tennessee, Minnesota, Idaho, and Utah. In his view, the utilities created a national monopoly that threatened American power customers and sought to add Muscle Shoals to their conglomerate.<sup>38</sup> The senator worked to stop any additional growth, pushing for a halt to all permits for privately owned power dams on the Tennessee River.

This move fit well with Norris's greater conservationist vision for the Valley. If Alabama Power and Tennessee Electric proved unable to extend their "monopolistic control" on the river, the government could step in to promote a more complete revitalization of the area, surveying the river's resources and planning for a series of dams for power, flood control, navigation, and fertilizer production that included experimentation and research.<sup>39</sup> Government ownership and operation meant harmony and cooperation; it meant an equitable distribution of the benefits of water and power incompatible with pure profit-seeking. Norris's ardor led to eloquence: "If we should properly develop this project, we would tap this lightning that man has called electricity and convert its destructive and ruthless forces into a friendly power that would turn the countless wheels of toil all thorough the South and bring happiness and comfort to thousands of humble homes."<sup>40</sup> Government development promised a prosperity that reached every citizen. Freedom from flood and the convenience of electricity would be widely available

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<sup>38</sup> *Congressional Record* (Senate), 68<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1925, 66, pt. 2: 1085.

<sup>39</sup> "Norris Offers Government Operation Measure," *Florence Times*, 5 January 1926, 1; Untitled editorial, *Florence Times*, 4; and Norris, *Fighting Liberal*, 264.

<sup>40</sup> *Congressional Record* (Senate), 69<sup>th</sup> Cong., 1<sup>st</sup> sess., 1926, 67, pt. 5: 5213.

and accessible, but only if the private power and fertilizer companies could be prevented from turning the investment at Muscle Shoals into a profit-driven enterprise.

Wisconsin's Progressive Republican, Robert LaFollette, echoed his ally's fears of private operation. Companies manipulated stocks, juggled accounts, and collected profits instead of selflessly dedicating the development to the needs of the people in the Valley. Calls for cheap fertilizer were a "blind" used to fight government operation, though, in Norris's opinion, most knew that only the government could most economically and efficiently produce nitrates at Muscle Shoals. Should the federal government take over the plants, its success would show just how extortionate the trusts had been.<sup>41</sup> Even some southerners reluctantly joined Norris's fight. In the wake of six years of failed negotiations with private companies, South Carolina's Ellison D. Smith saw no alternative to government operation, at least on a temporary basis. The senator wanted cheap fertilizer, but the government needed to prove that its plants could do the job before expecting a private company to commit to a solid guarantee for full production. Until the plants actually produced a meaningful product, the government stood guilty of having "broken faith with the American people."<sup>42</sup>

Granted, Smith's position straddled the question of private or public operation of the plants, and it came at a time when compromise began to percolate among the defenders of the power and fertilizer company leases. Yet his argument fit well with those of Norris and LaFollette. The government poured millions into the construction of the two nitrate plants, the hydroelectric dam, and the associated equipment that powered the project. The longer it sat idle, the longer the people of the Valley watched their resources go to waste. Should the government

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<sup>41</sup> *Congressional Record* (Senate), 69<sup>th</sup> Cong., 1<sup>st</sup> sess., 1926, 67, pt. 5: 4902-4.

<sup>42</sup> *Congressional Record* (Senate), 69<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1927, 68, pt. 4: 4537.

step in to operate the plants, even temporarily, fertilizer, power, and the untapped wealth of the Tennessee Valley might be put to better use.

By mid-1927, the government reached yet another stalemate. The House Military Affairs Committee rejected all promising bids for Muscle Shoals, and the Senate continued to debate almost exclusively the merits of Norris's plans for government operations. More than a decade since Woodrow Wilson authorized the funding for the plants, North Alabama saw little in the way of rewards. The wait was frustrating, but the people of the Tri-Cities had learned not to rest on the hopes that the federal government would implement the economic development long promised by the Muscle Shoals project. Early in 1926, the Sheffield-Tuscumbia Chamber of Commerce announced that a campaign to raise \$100,000 in municipal bonds to attract the King Company, a metal brackets manufacturer, had reached a "safe margin" and that the company was ready to set up shop in the region, eventually planning to hire 300 to 400 men and drawing on iron from the Sheffield furnace for production. The news led the *Florence Times* to praise the developers who had spent thousands in the area to pave streets and sidewalks and perform other improvements without waiting on word of a decision on Muscle Shoals. While some had "crawled in under a log," others had learned that "it does not take action by Congress or any other outside assistance to make progress worth while [sic] in local affairs." The federal government was not a "Santa Claus" who would "leave prosperity in their stocking some night while they are dreaming."<sup>43</sup>

The *Times* echoed the desire for development that emanated from the Shoals. For years, Florence, Sheffield, and Tuscumbia's leaders waited for the thousands of workers and millions of federal dollars promised by the Muscle Shoals plant. As the debate in Congress raged, city

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<sup>43</sup> "Bonds for Sheffield-Tuscumbia Plant Taken," *Florence Times*, 3 January 1926, 1; and Untitled editorial, *Florence Times*, 28 January 1926, 2.

leaders faced constant vacillation between hope and despair, as well as boom and bust as investors raced into the area, only to leave when another leasing plan fell to defeat.

Washington's plans for economic progress served to encourage local entrepreneurship and economic leadership, even when it failed to produce real results. This effect would become a telling characteristic of government development in the Tennessee Valley.

Inspired by the success of their neighbors, in April 1926, the Florence Chamber of Commerce held a mass meeting to encourage citizens to contribute money for a new underwear factory. Leaders promised that with adequate public subscriptions, the \$300,000 Gardiner-Warring Company would assuredly choose Florence for their facility. As an added encouragement, the paper listed the most prominent donors, local businessmen T.M. and B.A. Rogers, who added \$10,000 to the drive (undoubtedly with expectations of a substantial increase in customers). Within weeks, the city reached its subscription target and one resident, Mrs. George P. Jones, sold a five-acre plot of land to the company at well under market value.<sup>44</sup>

Local realtors founded the Muscle Shoals Commercial Club on \$30,000 in donations to lead the development of the entire district. The club addressed national issues, particularly working to fight the power companies' bid for Muscle Shoals, but its main task was to work towards the improvement of the Tri-Cities, building off of the work of the individual chambers of commerce. The Club made the final arrangements for financing the location of the Super Tool Company of Detroit and the Sorg Engine Manufacturing Company of Owosso, Michigan, at a dinner the next month and later signed a contract with Bliss Refrigerating. The Commercial Club promised to invest \$140,000 towards the location of Super Tool, with a \$60,000 public subscription. Local support would also help with Sorg and Bliss. Combined, the three plants

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<sup>44</sup> "Florence Men to Determine Progress Tonight," *Florence Times*, 26 April 1926, 1, 7; and "Very Desirable Location Is Secured for New Factory to Manufacture Underwear," *Florence Times*, 13 June 1926, 1.

projected a workforce of 1,500 skilled laborers – a welcome boon with employment down at the government projects.<sup>45</sup>

By all measures, the Muscle Shoals Commercial Club was a success, and it bridged the gap between federal and local development in important ways. The club was led by Tri-Cities developers for the improvement of the Muscle Shoals District. The group relied on public subscriptions in order to encourage companies to make the initial investment in the region, offsetting some of the cost of relocation while also giving the public a real stake in North Alabama's economic well-being. Tellingly, the club addressed the politics of the nitrate plants and dam, promising to help fight the bid from Alabama Power, but federal development remained a secondary concern. The overarching goal was community improvement. If Congress would not act to assist the people of the Tennessee Valley, the people could just as easily help themselves.

For the Tri-Cities' leaders, economic relief was not primarily agricultural relief, as it was for many who called for the operation of the nitrate plants. City developers looked to bring in companies that would use the region's resources (cotton for a knit underwear factory, locally produced iron for a bracket manufacturer or engine plant). They foresaw a future that more closely aligned with that of Norris and his followers, who demanded comprehensive development of the region based on its natural advantages. Ironically, their vision also resembled that of their enemy, Alabama Power, which saw widespread use of electric current as the key to an economic revitalization of the South, powering homes, farms, and more importantly, factories that would consume the current as quickly as it could be generated. Local distaste for the methods and corporate organization of Alabama Power precluded the utility as a

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<sup>45</sup> "Realty Developers Organize Commercial Club," *Florence Times*, 12 September 1926, 1, 7; and "Two New Industries Secured Third Certain," *Florence Times*, 24 October 1926, 1, 2.

viable option, but as congressional proponents of private operation moved towards more compromising positions on Muscle Shoals, many city leaders found themselves cautious supporters of government development.

In October 1927, the *Florence Times* voiced an opinion quickly gaining popularity among many congressmen. The paper called government operation “more than a possibility” and suggested that even those opposed to Norris’s plans for the properties would vote for temporary government operation, just to activate the plants.<sup>46</sup> In December, Norris reintroduced his bill for government operation. The rural vote continued to line up behind the Madden Bill, which called for the acceptance of the American Cyanamid offer, and W.B. Bell, President of American Cyanamid, sought to make his lease more attractive by adding a recapture clause that would allow the government to take back the facilities if the company failed to produce enough fertilizer. In his presidential message to Congress, Coolidge reasserted his support for private operation while expressing the fear that the nitrate plants were becoming obsolete in their inactivity. He called for the disposal of the facilities, turning the revenue to experimentation with nitrate production and fertilizer manufacturing.<sup>47</sup> The Madden Bill meant immediate private operation, but events in the Senate began to overtake American Cyanamid’s chances for success.

When the House Military Affairs Committee dismissed the major bids for Muscle Shoals, its report included a provision for government operation if no bid proved acceptable. For Norris,

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<sup>46</sup> “Federal Operation Now Looms,” *Florence Times*, 14 October 1927, 1.

<sup>47</sup> “Farmers Eyes Upon Madden Bill,” *Florence Times*, 4 January 1928, 4; Bell to Martin B. Madden, Chairman, Committee on Appropriations, 23 March 1928, 45:3, Underwood Papers, ADAH; and “President Delivers His Message,” *Florence Times*, 16 December 1927, 1. Coolidge’s fears of obsolescence were a common topic of conversation in Congress, involving numerous scientific discussions of the relative merits of the methods used to produce nitrates at the two plants. Many on both sides of the debate used the issue to support calls for temporary operation by either private or public agencies as a “test” of the facilities’ continued relevance.

this concession opened new possibilities. In December 1927, he once again made his case for government operation. He led with an argument for the power possibilities at Muscle Shoals, but carefully tied it to the larger development of the river. He called for government surveys of the Tennessee River, laying out a series of storage dams that would regulate the flow of the Tennessee, thereby increasing the hydroelectric potential. Such a massive project could only be reliably completed by the government, Norris argued, because private power companies would consume the benefits in their search for profits, demanding “tribute” for “the millionaires in Wall Street.”<sup>48</sup> Norris blamed the inactivity at the plants and dam on southerners and their elected representatives: “The South itself refused the cup of happiness and contentment that was extended by a friendly hand.” If the government had control, “[it] would develop a system of electrical distribution the benefits of which would ultimately reach every factory in the South, every home and every municipality between the Potomac and the Gulf, the Mississippi and the Atlantic.”<sup>49</sup>

The Nebraskan was willing to compromise to prove the merit of his claims. In January 1928, he offered to allow American Cyanamid to operate one of the nitrate plants for fifty years, leaving the rest of the facilities in the hands of the government. The company refused to budge from its bid, and the Farm Bureau backed the Madden Bill, claiming that the government had not yet provided relief for the farmers and that Norris’s compromise would never pass.<sup>50</sup> Undeterred, Norris continued his work in the Senate. In February, he drafted a Joint Resolution allowing the Secretary of War to sell power at the dam and steam plant to potential buyers, with a preference for cities, counties, and non-profit organizations. All revenue would go to the

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<sup>48</sup> Norris, “Politics and Muscle Shoals,” *Congressional Record*, 19 December 1927, 3, 32:2, Hill Papers, Hoole.

<sup>49</sup> *Ibid.*

<sup>50</sup> Hubert Baughn, “Cyanamid Company to Refuse Norris Compromise,” *Florence Times*, 30 January 1928, 1.

Department of Agriculture for research and experimentation into fertilizer production, and the government would agree to build new nitrate-consuming fertilizer plants across the country, including one at Muscle Shoals.<sup>51</sup> Norris did not give a specific guarantee on fertilizer, and his resolution hinted at the need for a reevaluation of the usefulness of the Alabama plants, but he addressed demands for agricultural development through cheap, available fertilizer – a requirement for any compromise with the forces of private operation. On March 6, 1928, Norris’s bill passed the Senate and awaited the results of debate in the House.<sup>52</sup>

Discussions of power production led to another potential compromise; both sides feared that the electric trust, headed by Alabama Power, would exploit the facilities for their own interests. The utility already received current from Wilson Dam and as Congress deliberated, Alabama Power looked to use the extra power to extend their service in North Alabama. In the city of Athens, supporters of the private utility circulated a petition to sell a municipally owned power plant to Alabama Power in return for cheap electricity. The *Florence Times* begged the city to consider the economic losses that would accrue from monthly payments to the utility. Senator Hugo Black praised Athens as one of the few cities not yet under Alabama Power’s umbrella, and expressed his concern that the government might sell its surplus power to the utility, making “free” cities like Athens centers of profit for the power trust.<sup>53</sup> Norris promised that if his resolution passed, Athens could build a transmission line to Muscle Shoals, taking power directly from Wilson Dam. He accused Alabama Power’s lawyers of combining personal profit and corporate propoganda, and he promised to send evidence to the Federal Trade

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<sup>51</sup> *Congressional Record* (Senate), 70<sup>th</sup> Cong., 1<sup>st</sup> sess., 1928, 69, pt. 3: 3434-5.

<sup>52</sup> “Senate’s Passage of Amended Norris Bill Biggest Step for Shoals Settlement Yet Taken,” *Florence Times*, 14 March 1928, 4.

<sup>53</sup> “Don’t Do It, Athens,” *Florence Times*, 12 February 1928, 2; *Congressional Record* (Senate), 70<sup>th</sup> Cong., 1<sup>st</sup> sess., 1928, 69, pt. 3: 3435, 3437.

Commission for possible investigation.<sup>54</sup> Both Black and Norris feared the power trust, and their opposition to Alabama Power created important ties in the coming debate.

In March, the House Military Affairs Committee chairman, John M. Morin, submitted a committee report that would serve as an amendment to Norris's government operation bill. He called for the creation of a "Muscle Shoals Corporation" to produce fertilizer and sell surplus power at the best possible price. While Norris built his bill around power and wider waterways development, Morin's compromise stressed fertilizer, calling for low cost production at a minimum profit that would be returned to the government for its initial investment. The report freely admitted that government operation was a last resort, stating that the committee still preferred a private lease, but after detailing the committee's inability to agree on a bidder, Morin called for the temporary establishment of a government corporation to operate the plants until a successful private lease could be found. He consoled supporters of private operation supporters by claiming that government ownership would keep the plants in working order until a private company could lease them.<sup>55</sup> Several committee members dissented, including Alabama's Lister Hill, whose minority report explicitly refused government operation.<sup>56</sup> However, others in the Alabama delegation were prepared to deal with Norris in return for a final decision.

In House debates on the Norris Bill, Alabama's Edward Almon called the measure the perfect farm relief measure. He explained that the government was already "in business" at Muscle Shoals, and emphasized that the bill under discussion ensured that farmers would get the fertilizer they needed.<sup>57</sup> In Florence, the *Times* backed Norris as well. The paper went so far as

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<sup>54</sup> *Congressional Record* (Senate), 70<sup>th</sup> Cong., 1<sup>st</sup> sess., 1928, 69, pt. 5: 4874-5.

<sup>55</sup> Morin, Report, Committee on Military Affairs, House, 70<sup>th</sup> Cong., 1<sup>st</sup> sess., 30 March 1928.

<sup>56</sup> Hubert Baughn, "Hill Draws Up Minority Report," *Florence Times*, 14 April 1928, 1.

<sup>57</sup> *Congressional Record* (House), 70<sup>th</sup> Cong., 1<sup>st</sup> sess., 1928, 69, pt. 7: 7682.

to state that the “advantages of government operation are so manifest that the only cause for refusal by Congress to accept it will be interpreted as being due to the activities of the lobby of the power trust which has so vigorously and so persistently fought government operation.” The paper gave two specific reasons to back government operation: cheap fertilizer and a chance to show the dishonesty of the power companies. Government operation meant the profit from Muscle Shoals went to the farmer instead of Alabama Power.<sup>58</sup> With increasing pressure at home and in Washington, even Hill fell in line with his colleagues. In response to a letter from an economist with the National Lumber Manufacturer’s Association calling for Hill to protect private enterprise, Hill responded that, while he did not support the measure, it was the “best bill that we can possibly get passed” and would finally put the plants to work. As long as the bill provided for the production of cheap fertilizers, Hill would vote for it regardless of other reservations.<sup>59</sup>

In late May, the compromise passed the Senate over a filibuster by Tennessee’s Kenneth D. McKellar, who opposed the government construction of a dam at Cove Creek, near Knoxville. Both Heflin and Black fought for the bill – Black spent the night in an anteroom while Heflin slept on a cot on the floor of the Senate. Soon after, the compromise passed the House and went to Coolidge for his approval.<sup>60</sup> The bill’s proponents were not optimistic. Coolidge had consistently rejected government operation of Muscle Shoals, and while he called for domestically produced fertilizer to aid American farmers, he always couched production at Muscle Shoals in terms of an acceptable lease to a private corporation. Even if the government

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<sup>58</sup> “Government Operation Offers Best Solution to Shoals Question,” *Florence Times*, 3 May 1928, 1.

<sup>59</sup> C.W. Bahr to Hill, 15 May 1928; and Hill to “Friends,” 16 May 1928, 32:30, Hill Papers, Hoole.

<sup>60</sup> Hubert Baughn, “Shoals Measure Passed by Senate and House; Now Goes to Coolidge,” *Florence Times*, 25 May 1928, 1, 8.

corporation was a temporary solution, the philosophy behind it clashed with his support for private enterprise. While the bill sat on the president's desk, Norris promised that it "will do no injury to any legitimate business" and would benefit the region. Only the government had the resources to conduct the research that would determine the cheapest method for producing fertilizer, build the dams needed to aid the region's development, and distribute power equitably. He stated his case clearly: "It is therefore a government function, and it would be an economic sin to permit it to be constructed and operated by private parties for profit."<sup>61</sup> His appeal fell flat. On May 29, 1928, the Morin-Norris compromise died by pocket-veto.

This hardly came as a shock to Norris and his supporters. The president had made his opinion on government ownership perfectly clear. In June 1924, at a meeting of the Business Organization of the Government, Coolidge called for "fair returns" on any government investment in public improvements. Criticizing "carelessness" in the expenditure of public money, he plainly stated, "I am for economy. After that I am for more economy ... [That] is my conception of serving all the people."<sup>62</sup> Government "extravagance" brought "ruinous" consequences for the United States.<sup>63</sup> His support for privatization reached every aspect of American enterprise, including agriculture. He told the American Farm Bureau that farming should "rest on an independent business basis." Though careful not to reject all government aid, Coolidge clearly believed that public money should act as a supplement instead of an economic crutch.<sup>64</sup> In the president's view, the nation's farm population shared his concern about public

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<sup>61</sup> *Congressional Record* (House), 70<sup>th</sup> Cong., 1<sup>st</sup> sess., 1928, 69, pt. 10: 10056.

<sup>62</sup> Coolidge, Address at the Meeting of the Business Organization of the Government, 30 June 1924, 1, 3, in The American Presidency Project, <http://www.presidency.ucsb.edu/ws/print.php?pid=24174>, accessed 20 April 2009.

<sup>63</sup> Coolidge, Fourth Annual Message, 7 December 1926, 2, in The American Presidency Project, <http://www.presidency.ucsb.edu/ws/index.php?pid=29567>, accessed 20 April 2009.

aid. Farmers “do not wish to have meddling on the part of the Government or to be placed under the inevitable restrictions ... which would result from permitting the Government to operate in the agricultural markets.” Instead, government leaders should encourage a “more intimate relation ... between agriculture and the other business activities of the Nation.”<sup>65</sup>

Muscle Shoals provided an ideal opportunity to practice government economy in agricultural relief. In his third annual Message to Congress, Coolidge noted that the project at Muscle Shoals was primarily a nitrate-producing facility, and he argued that the government should dispose of it accordingly. In fact, the site was the perfect example of “the almost utter incapacity of the National Government to deal directly with an industrial and commercial problem ... We have expended vast fortunes, we have taxed everybody, but we are unable to secure results, which benefit anybody.” The only apparent solution was transfer to the private sector.<sup>66</sup> He believed that a successful lease would remove a substantial drain on the federal budget, thus meeting his goal of government economy, and the activated plants would produce fertilizer for local farmers, providing a private solution to the region’s farm problems.

The president reasserted his views two years later. Despite fears that the plants were becoming outdated, Coolidge insisted on dedicating the nitrate plants to agriculture. In obtaining a profitable lease on the site, the government could then fund research into advanced fertilizer production.<sup>67</sup> Norris’s plan embodied a kind of government interference in the economy inimical

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<sup>64</sup> Coolidge, Address before the Annual Convention of the American Farm Bureau Federation, Chicago, Ill., 7 December 1925, 1, 5, in The American Presidency Project, <http://www.presidency.ucsb.edu/ws/print.php?pid=480>, accessed 20 April 2009.

<sup>65</sup> Coolidge, Third Annual Message, 8 December 1925, 8, in The American Presidency Project, [www.presidency.ucsb.edu/ws/print.php?pid=29566](http://www.presidency.ucsb.edu/ws/print.php?pid=29566), accessed 20 April 2009.

<sup>66</sup> *Ibid.*, 9.

<sup>67</sup> Coolidge, Fifth Annual Message, 6 December 1927, 6, in The American Presidency Project, <http://www.presidency.ucsb.edu/ws/print.php?pid=29568>, accessed 20 April 2009.

to Coolidge's vision of national prosperity. Months after rejecting Norris's program for public ownership, Coolidge confidently boasted, "Wastefulness in public business and private enterprise has been displaced by constructive economy."<sup>68</sup>

In the summer of 1928, New York Democratic Governor Al Smith and Republican Secretary of Commerce Herbert Hoover clashed in a battle for the White House. Both candidates addressed the situation at Muscle Shoals. Smith called for government operation so that "the nation will be reimbursed, agriculture will be benefitted by cheap production of nitrates for fertilizer and the surplus power will be distributed to the people."<sup>69</sup> The governor stressed conservation, citing Muscle Shoals as part of a larger policy of using natural resources for the public good. Smith was particularly critical of private utilities, telling voters "the government must control the switch that turns on or off the power."<sup>70</sup> Hoover mirrored Coolidge's calls for private enterprise and expressed his opposition to government operation of industries as a general rule. However, in a campaign speech at Elizabethtown, Tennessee, the future president admitted that Muscle Shoals presented an important exception, since the government was already operating the dam and producing power.<sup>71</sup> Hoover's victory in November led to more confusion at Muscle Shoals. In the Senate, government operation seemed the only feasible option, and with Hoover's comments, Norris and his supporters held out hope that a bill could pass. In the House, Coolidge's veto and the continuing Republican ascendancy suggested the opposite course.

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<sup>68</sup> Coolidge, Sixth Annual Message, 4 December 1928, 1, in The American Presidency Project, <http://www.presidency.ucsb.edu/ws/print.php?pid=29569>, accessed 20 April 2009.

<sup>69</sup> "Smith Gives View on Shoals and Water Power Evils," *Florence Times*, 23 August 1928, 1.

<sup>70</sup> *Ibid.*, 1, 2.

<sup>71</sup> Senator Hugo Black referred to Hoover's speech in the Senate in October 1929. See *Congressional Record* (Senate), 71<sup>st</sup> Cong., 1<sup>st</sup> sess., 1929, 71, pt. 4: 4393.

Coolidge's rejection of the Norris-Morin compromise changed the nature of the debate among Alabama's congressmen. They had abandoned their insistence on private operation to accept a bill that called for temporary government operation with the possibility of permanent public ownership. When that failed, the legislators faced a tough decision: support government operation and get legislation passed in the Senate or back private operation and hope the new Republican president would approve it. The state of the nitrate plants made the choice much harder. When national correspondent Robert Talley visited the nitrate plants in November 1928, he found dust collecting on the equipment. Calling the project "a city of the dead," he pointed to dark furnaces and cold smokestacks. Talley found a "large glass jar" on a dusty shelf filled with "five pounds of a white substance that looks and feels like damp salt." The unused ammonium nitrate, manufactured during the brief period of operation during World War I, symbolized the sheer waste of the plants' potential. Talley described the vacant lots and empty streets amid the cotton fields of the Tri-Cities, waiting on a prosperity that seemed increasingly distant. In his estimation, the people of the area cared little who took control of the plant: "All they want is to have the plants operated."<sup>72</sup> The congressional delegation agreed. Between 1929 and 1932, Alabama's Congressmen backed any measure likely to succeed, as long as it fit two requirements: aid to the rural population in the form of fertilizer and the rejection of the (loosely defined) power and fertilizer trusts that sought to use Muscle Shoals for their own profits.

In the immediate aftermath of the veto, Hugo Black threw his support to government operation, but the complicated nature of his beliefs was indicative of the mood of the Valley. He explained his position in a July 1928 speech before a crowd of 2,500 in Florence. Black began by acknowledging that many people were hesitant to support government operation, citing the

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<sup>72</sup> Robert Talley, "Talley Calls Big Nitrate Plant Here a Large 'Beehive without any Bees,'" *Florence Times*, 23 November 1928, 1, 8.

United States' traditional encouragement of private industry. In many cases, Black agreed with the merit of that view. He freely admitted that he had wholeheartedly supported the Ford offer which "would have meant great things to the development and industries of the South," and had initially backed the offer of American Cyanamid. Yet the failure of private operation legislation caused Black to rethink his stance. While the private sector should be protected, some specific industries required a different economic outlook. He argued that the power industry carried the constant threat of monopoly, and in its original legislation, the Wilson administration recognized this threat and planned for government operation. In the same spirit, Norris called for government operation, but was denied by Coolidge in a "tragedy" for the farmers living a "measly existence for lack of funds." Black did not specifically back either side, but he admitted that the current political situation indicated that government operation was the only way for the farmers of the Tennessee Valley to receive cheap fertilizer and for the people and industries of the area to enjoy the electric current that would bring future prosperity.<sup>73</sup>

In February 1929, the House Military Affairs Committee reported a bill, named for Georgia Democrat William Carter Wright, calling for the acceptance of the American Cyanamid offer. In May, Norris reintroduced his bill for government operation in the Senate, hoping that the new Republican president would find it more acceptable than Coolidge. With the debate renewed, Black placed amendments before the Senate, modifying Norris's bill to provide a three-month opportunity for the government to lease the plants before going into operation on its own. As he told the Public Ownership League of America, Black wanted "an unmistakable guarantee" on the manufacture of fertilizer by an established company before he would agree to lease the properties. He noted that American Cyanamid was such a concern, having produced nitrates at its Niagara Falls plant, but he was careful to avoid an outright endorsement. In fact, Black hinted

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<sup>73</sup> "Huge Crowd Hears Black and Endorses Shoals Views," *Florence Times*, 18 July 1928, 6.

that he was “not so favored to the amendments I have offered that I am not ready to depart from them ... What do you care if you can hear the rolling of those wheels?”<sup>74</sup> His amendments were simply a way to get legislation past Hoover. As long as legislation benefitted state farmers, Black promised to support it, regardless of its particulars.

This ideological ambiguity affected his colleagues as well. The plight of Alabama farmers drove Edward Almon to admit his own indifference. Almon supported the tenets of the Wright Bill, which would give American Cyanamid the properties for a lease of 50 years, but he feared the Senate would never pass it. The Alabamian introduced his own version of the Norris Bill with Black’s amendments in the House, but suggested that he was not “wedded” to the “Norris-Black-Almon” Bill. His main concern was the development of the river and the production of fertilizer.<sup>75</sup>

Lister Hill was more vocal in his support of the American Cyanamid offer, telling one Sheffield resident that the Wright Bill was the only legislation before Congress that would preserve the properties for national defense while still giving fertilizer to farmers and looking towards long term river development (the bill called for the construction of two more dams on the Tennessee, the unnamed Dam 3 and Cove Creek).<sup>76</sup> Yet Hill later admitted that he had supported the original Norris Bill, which had been “emasculated” by the fertilizer trust, and had even backed Al Smith’s waterpower policy.<sup>77</sup> Heflin best stated the position of Alabama’s delegation: “I want to put that machinery to work; I want the power used to bless and benefit the

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<sup>74</sup> *Congressional Record* (Senate), 71<sup>st</sup> Cong., 1<sup>st</sup> sess., 1929, 71, pt. 5: 5591; and J.H. Taylor, “Black Urges United Front on Shoals,” *Florence Times*, 24 November 1929, 8.

<sup>75</sup> *Congressional Record* (House), 71<sup>st</sup> Cong., 2<sup>nd</sup> sess., 1929, 72, pt. 1: 959.

<sup>76</sup> Hill to W. Grady Clark, Sheffield, 18 December 1929, 33:38, Hill Papers, Hoole.

<sup>77</sup> Hill to E.B. Gaston, Fairhope, 30 January 1929, *ibid*.

people in that vicinity.”<sup>78</sup> Private operation still held sway over Alabama’s representatives, but they were willing to compromise. Their concern was fertilizer, and to a lesser extent power and regional waterways development. As long as Muscle Shoals gave assistance to the rural populations struggling to survive, Black, Hill, Heflin, and Almon would fall in line.

The willingness to compromise did not extend to the offer of Alabama Power, which continued to draw electricity from Wilson Dam. In January 1929, the utility’s president, Thomas Martin, tried to negotiate a contract extension with the outgoing Coolidge administration, but the president refused, telling Martin that he would only approve a longer agreement if it included provisions for operating the nitrate plants. Martin undoubtedly hoped to provide security for his company, still working off of “temporary” contracts with the War Department, but many in Florence saw the attempt as an underhanded attempt to grab Muscle Shoals – a perfect example of the “power trust” in action.<sup>79</sup> The region remained on guard against the creeping tentacles of the trust, even claiming that Coolidge favored Alabama Power when the government refused to sell power directly to the city of Muscle Shoals.<sup>80</sup>

The *Florence Times* engaged in a prolonged attack on the utility. The paper told Alabama Power stockholders that they needed to take responsibility for the actions of the company, which was charging “exorbitant” rates while trying to silence opposition. In one political cartoon, a fat tycoon in a top hat labeled “Power Trust” ripped “Plans for [a] Big Industrial Center at Muscle Shoals” from the wall. In another, a horse representing “U.S.

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<sup>78</sup> *Congressional Record* (Senate), 71<sup>st</sup> Cong., 2<sup>nd</sup> sess., 1930, 72, pt. 6: 6427.

<sup>79</sup> “No Long Term Contracts for Power Unless Plants Are Operated,” *Florence Times*, 10 January 1929, 2.

<sup>80</sup> Hubert Baughn, “Muscle Shoals City Plea to Buy Wilson Dam Power Rejected by Government,” *Florence Times*, 23 December 1928, 1.

Agriculture” attempted to feed at the trough of Muscle Shoals while the snarling dog of the power company guarded the food, preventing the horse from eating.<sup>81</sup>

The image of an overarching power trust, blocking North Alabama from its true potential, fit the climate of increasingly anti-utility public sentiment. The citizens of the Tri-Cities fretted over the fertilizer trust’s supposed stranglehold on the area’s farmers, but their main concern was Alabama Power’s effect on industry in the region. City leaders conveniently forgot their former praise of the utility’s work to bring industries to the Valley. As congressional leadership decried the existence of the trust, J.G. Baker of the Sheffield-Muscle Shoals Chamber of Commerce claimed that Alabama Power’s rates interfered with the state’s industrial expansion. While the utility gave the new Goodyear plant in Gadsden inducements to locate in the city, the company had done nothing to lower rates in Florence. He specifically cited Firestone, which had rejected North Alabama in favor of cheaper coal power in Akron, Ohio. At Niagara Falls, hydroelectric energy created the “greatest electro-chemical industry in the world” thanks to its low transmission costs. Baker argued that North Alabama had greater potential, but no electro-chemical industries chose to relocate in Muscle Shoals.<sup>82</sup>

Senator Hugo Black took to the airwaves to blast the utility. With the nation facing a depressed economy, only the power industry “marches steadily forward.” The company kept prices high, Black complained, ruining industry and limiting customers. At Muscle Shoals, he found a perfect example of the perfidious actions of the statewide utility. The town, which abutted the government reservation, could not buy power from Wilson Dam, even though it was publicly owned and dedicated to the benefit of farmers in peacetime. Instead, residents had to

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<sup>81</sup> “Without Defense” and “The Great ‘Industrial Upbuilder,’” *Florence Times*, 2 June 1929, 2; and “And It Was Built for the Horse,” *Florence Times*, 14 July 1929, 2.

<sup>82</sup> “Early Relief from Power Burden Is Need of Alabama,” *Florence Times*, 1 August 1929, 1; and “Possibilities for Industry,” *Florence Times*, 28 August 1929, 2.

pay the power trust to light their homes, farms, and offices.<sup>83</sup> Florence Judge Fred Johnson, Jr., informed Black that the courthouse at Muscle Shoals was lit by kerosene lamps, even though it was only two miles from the dam. The senator asserted that Alabama Power stock multiplied by “sixty-eight and one-half fold” thanks in part to its control of Muscle Shoals and immediately began working on legislation that would provide power to regional municipalities as soon as the president signed overall legislation to operate Muscle Shoals.<sup>84</sup>

Power availability was particularly important in light of the efforts of the cities of Florence and Sheffield to attract new industries and encourage local entrepreneurship. In an effort to stave off discouragement after Coolidge’s veto, Florence’s leaders encouraged citizens to forget about the operation of the plants in the “distant future” and focus on the foreseeable by working to attract small industries.<sup>85</sup> The *Florence Times* quoted the U.S. Chamber of Commerce on considerations for communities planning industrial expansion. The city needed to look to specific commodities that the region could economically produce and distribute, then locate factories with experienced managers to produce them for the market.<sup>86</sup> Leaders called for a “definite and determined” industrial campaign that would systematically work to bring in businesses that met local needs and would work to build up the community. They praised diversity, calling for more wage-based industries to balance North Alabama’s existing agricultural economy.<sup>87</sup> City leaders evoked a region prepared to go ahead with its own

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<sup>83</sup> Black’s address was included in the *Congressional Record*. See *Congressional Record* (Senate), 71<sup>st</sup> Cong., 2<sup>nd</sup> sess., 1930, 72, pt. 4: 4469.

<sup>84</sup> *Congressional Record* (Senate), 71<sup>st</sup> Cong., 2<sup>nd</sup> sess., 1930, 72, pt. 10: 11177; and Hubert Baughn, “Current for Municipalities Urged,” *Florence Times*, 25 June 1930, 1.

<sup>85</sup> “Let’s Get Down to Earth,” *Florence Times*, 8 June 1928, 1.

<sup>86</sup> “A New Interest,” *Florence Times*, 14 April 1929, 2.

development. Even as congressional leaders pushed for any bill with a chance of passing muster, the Tri-Cities again turned inward, planning for industrial development to offset the overwhelmingly agricultural nature of the District, regardless of the legislation that emerged from Washington. The region only needed power, and by fighting the “power trust” and its local representative, Alabama Power, the Tri-Cities would realize a diversified, interdependent economy that would survive economic hardships.

The stock market crash only served to underline the region’s need for industry. The *Florence Times* took no notice of the crash until nearly a month later, when it downplayed the disaster as a “natural” readjustment of the nation’s wealth that would continue the decline in regional buying power. With its “basic advantages” untouched, all the area needed was confidence to continue its growth.<sup>88</sup> In rural areas, economic depression was an ongoing concern. In fact, the increasingly desperate condition of Valley farmers motivated Alabama’s congressional delegation to keep Muscle Shoals dedicated to the production of cheap fertilizer. As the region’s urban leadership learned, however, the crash lessened the prospects for growth. In early 1930, city leaders advised locals that outside industries would no longer be willing to move or expand to a new area, though they remained optimistic, suggesting that when the economy returned to normal, the surviving businesses would be sounder for the experience. Leaders told citizens to keep the region’s appeal visible. As long as the region maintained available factory sites, industries would recognize the “progressive” nature of Muscle Shoals and plan for a future there.<sup>89</sup>

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<sup>87</sup> “An Industrial Campaign,” *Florence Times*, 28 July 1929, 2; and “Strength in Diversity,” *Florence Times*, 9 September 1929, 2.

<sup>88</sup> “Shoals Not Injured,” *Florence Times*, 27 November 1929.

<sup>89</sup> “New Industries,” *Florence Times*, 28 February 1930, 4; and “Prepare to Seek Factories,” *Florence Times*, 2 September 1930, 4.

By 1930, Congressional discussions on the future of Muscle Shoals took on a new urgency. In April, Hill dropped his support for the American Cyanamid bill and began backing the Norris Bill with Black's amendments. Even Georgia's William C. Wright, who authored the nitrate company's lease legislation, shifted his loyalties. As Almon noted, prospects for a lease that would pass Congress were so bleak that the House was turning to "the only measure that offers a solution."<sup>90</sup> The next month, the Norris Bill emerged from the House Military Affairs Committee with an amendment that changed the bill from government operation to a private lease. At first, Hill and Black tried to work with the substitute bill, planning to strengthen its guarantees for fertilizer production, but the Alabamians soon realized that the substitute would never pass the Senate. With Congress nearing adjournment, Hill spoke passionately for Norris's plans. Compared with the House's substitute, Norris's bill was an "easy choice." The legislation kept the dam out of the hands of Alabama Power and while Norris's fertilizer provisions were not as strong as Hill might have liked, they guaranteed fertilizer for farmers at a limited profit.<sup>91</sup>

Sensing the possibility of compromise, Norris proposed government operation of the power facilities and private operation of the nitrate properties, but congressional Republicans on the Military Affairs Committee refused to accept even partial government operation. For Almon, the rejection was the latest in a long line of roadblocks that kept Muscle Shoals from benefitting the farmers. Not only would the bill's passage provide the needed fertilizer, it would employ men now out of work and "bring joy to the hearts of millions of people."<sup>92</sup> Norris's compromise

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<sup>90</sup> Hill to H.B. Dowling, Ozark, 7 April 1930, 33:41, Hill Papers, Hoole; and Hubert Baughn, "Fight for Early Shoals Report," *Florence Times*, 7 April 1930, 1, 2.

<sup>91</sup> Hubert Baughn, "Hill to Offer 6 Amendments to Shoals Bill," *Florence Times*, 23 May 1930, 1; and *Congressional Record* (House), 71<sup>st</sup> Cong., 2<sup>nd</sup> sess., 1930, 72, pt. 9: 9680-1.

<sup>92</sup> "Hope for Unity on Shoals Grows," *Florence Times*, 8 June 1930, 1; Hill to E.B. Gaston, 9 June 1930, 33:43, Hill Papers, Hoole; and *Congressional Record* (House), 71<sup>st</sup> Cong., 2<sup>nd</sup> sess., 1930, 72, pt. 11: 11925-6.

died in the House and the private leasing bill died in the Senate. In the first year of the Great Depression, the promise of relief for the people of North Alabama seemed as distant as ever.

When the 72<sup>nd</sup> Congress convened in 1931, a conference committee restored Norris's compromise. As before, the government would operate the power features of the Muscle Shoals facility while the fertilizer plants would be offered for private lease. The Alabama state legislature passed a resolution urging the use of Muscle Shoals in an attempt to spur Congress into action.<sup>93</sup> The politicians' main concern was President Herbert Hoover. During the campaign, he had hinted at the possibility of allowing government operation at Muscle Shoals, but few felt certain he would honor that promise. On February 20, the House passed the compromise, followed by the Senate three days later. The *Florence Times*, ever optimistic, believed that Hoover would hold true to his Elizabethtown, Tennessee, campaign speech and approve it, even if it was not exactly what he wanted.<sup>94</sup> Alabama's Governor Benjamin M. Miller sent a telegram to the president, stressing the opportunity for private investment in the plants, which would in turn employ men and boost farm yields, helping to ameliorate the effects of depression and drought. When Hoover responded, asking if anyone would lease the plants under the conditions imposed by Congress, Miller responded in the affirmative. The need in the Cotton Belt for cheap fertilizer was great, and "at least one outstanding Alabama industrialist" expressed interest in the plants. Miller promised that Hoover would win the praise of those companies that feared government operation of the nitrate plants, and assured him that the business community would formulate a lease quickly.<sup>95</sup>

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<sup>93</sup> "The Shoals Resolution," *Florence Times*, 13 February 1931, 4.

<sup>94</sup> "Will He Keep His Pledge on Muscle Shoals?" *Florence Times*, 24 February 1931, 1.

<sup>95</sup> Miller to Hoover, 24 February 1931; Hoover to Miller, 24 February 1931; and Miller to Hoover, 25 February 1931, SG19941:32, Benjamin M. Miller Administration Papers, ADAH.

After several suspenseful days, Hoover vetoed the Muscle Shoals bill. Along with his rejection of the legislation, the former engineer included a lengthy statement on the Muscle Shoals situation, outlining the reasons for his decision. Hoover analyzed the power possibilities and claimed that the government could not operate the power plant more cheaply than the power companies and still find the funds to construct more dams along the river. As suggested in his telegram to Governor Miller, Hoover also feared that the conditions for leasing the fertilizer plants were too restrictive, forcing potential businesses to make impractical guarantees. His main concern, however, was the creation of a government corporation to operate the hydroelectric generators and sell surplus power.

In the Senate, Black and Norris were outraged. The Alabamian derided the “great engineer” for his failure to aid the people of the South. He argued that additional dams would boost the power potential of the site, causing electric rates to fall. Black tied Hoover to the trusts, comparing him to the agents of “special privilege and greed” that would not “give to the plain, average, everyday citizen the crumbs that fall from their tables.”<sup>96</sup> He promised that the fertilizer plants could turn a profit, making them attractive to most businessmen. Finally, Black stressed his own credentials as a proponent of private industry in general, but charged that a real change was needed: “Mr. President, the time is coming in this Nation when something must be done in order to curb the growing power of those who themselves seek to destroy the private initiative and competitive business system upon which the Nation has been built.”<sup>97</sup> In a direct challenge to the Republican leadership, Black predicted that the coming Democratic Congress would have a new Muscle Shoals bill within a week of meeting. Norris concurred, telling

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<sup>96</sup> *Congressional Record* (Senate), 71<sup>st</sup> Cong., 3<sup>rd</sup> sess., 1931, 74, pt. 7: 7070-2.

<sup>97</sup> *Ibid.*, 7075.

Hoover he “ought to know better.”<sup>98</sup> In the House, Almon described Hoover’s statement as misinformed, and like Black, wondered why the president would go against his own promise to allow government operation at Muscle Shoals. On March 4, Norris marshaled a majority of 49 Senators to override the veto, but fell short of the requisite two-thirds vote, and his bill died.<sup>99</sup>

Thus, by the summer of 1931, the development of the Tennessee Valley seemed remote. Twice, George Norris had crafted bills for government operation that passed the Senate. Twice, the House forced Norris to include some aspect of private lease. Twice, bills came before the president that would put the properties at Muscle Shoals to work, and twice, those bills ended with a presidential veto. The Alabama congressmen who opposed Norris’s original government operation plans in favor of private leases to Henry Ford and the American Cyanamid Company proved willing to compromise in order to provide fertilizer for the revitalization of southern agriculture, only to face rejection at the hands of stauncher advocates of private operation. The results were frustrating, to say the least. However, the ongoing stalemate that prevented economic development for agriculture in the Tennessee Valley had an opposite effect on the industrial prospects for the region. As Congress squabbled, Tri-Cities leaders began their own development campaign, using local initiative to bring in industries that would boost employment and added income. As the federal government worked to agree on the exact nature of regional development, some groups in the Tennessee Valley gave voice to a different vision of the region’s economic future.

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<sup>98</sup> *Ibid.*, 7076-7, 7084.

<sup>99</sup> *Congressional Record* (House), 71<sup>st</sup> Cong., 3<sup>rd</sup> sess., 1931, 74, pt. 7: 7357; and “Senate Fails to Override Shoals Veto,” *Florence Times*, 4 March 1931, 1.

In his veto message, Hoover recommended that the states of Alabama and Tennessee appoint a joint commission to accept and review private bids for the Muscle Shoals plants. The president hoped that the states could come to an agreement that would put the facility into operation under the guidance of the private sector. In June, the Alabama State Senate passed a resolution that authorized Governor Miller to appoint his state's delegation. He chose Selma Judge Sam Hobbs, Alabama Polytechnic Institute Extension Director L.N. Duncan (later replaced by Prattville's Will Howard Smith), and Florence businessman W.F. McFarland to the positions and instructed them to meet with their three Tennessee counterparts, an army engineer, and a representative of the national farm organizations to construct a plan for operating the nitrate plants.

The joint commission began accepting written proposals in September, and planned a series of public hearings across both states. The only specific requirement for lessees was that the project be operated in the interest of fertilizer production.<sup>100</sup> By September 2, the commission already had seven bids for the properties including offers from both Alabama Power and Tennessee Electric Power, chemical manufacturers, and one Ohio furnace company. The commission sent out several bid requests to major national corporations including Ford Motor Company, General Electric, and American Cyanamid. Hoover reiterated his opposition to government operation, but Sam Hobbs noted that the commission was free to recommend government operation if no bid looked feasible: "Our hands are not tied ... Our job is to devise a means of putting the plant in operation principally as an aid to agriculture."<sup>101</sup>

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<sup>100</sup> "Miller to Name Shoals Commissioners," *Florence Times*, 30 June 1931, 1; and "Miller Names Shoals Commission," *Florence Times*, 14 July 1931, 1; "Commission Invites Shoals Bids," *Florence Times*, 4 August 1931, 1, 6.

<sup>101</sup> "More Shoals Bids Impend," *Florence Times*, 2 September 1931, 1, 6.

Florence's representative on the commission, W.F. McFarland, made his position clear to the *Florence Times*. His main concern was southern farmers. In McFarland's estimation, with the addition of the proposed dam at Cove Creek, the Muscle Shoals plants could produce an annual yield of 450,000 tons of fertilizer, enough for 6,000,000 acres. He was optimistic that the commission would find a private lease from a pro-farm corporation that would produce concentrated fertilizer and use the proceeds from the lease and the sale of power to finance fertilizer distribution and agricultural research.<sup>102</sup> In November, the commission's report to Hoover followed McFarland's prescriptions. Alabama and Tennessee representatives called for a private lease of both the power and nitrate facilities with the project dedicated to the revitalization of southern agriculture. As the *Florence Times* noted, the report temporarily reversed the slow trend towards government operation, and cities and counties across the Valley rushed to show their support for the commission's findings.<sup>103</sup>

The task of enacting the report fell to the House Military Affairs Committee, particularly the subcommittee led by Alabama's own Lister Hill. The committee charged Hill to craft legislation that would give "liberal" leasing provisions and a lengthy 18-month period to obtain a working bid, but with an alternate provision for government operation if no lease proved acceptable. Hill rose to the challenge, writing a bill that would "forge the first link in the chain of development and open up the industrial empire of the Tennessee Valley destined to become a greater Ruhr."<sup>104</sup> The "Hill Bill" emphasized the dedication of Muscle Shoals to the

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<sup>102</sup> McFarland, "Shoals Operation Would Save Great Sum Yearly on Fertilizer Expenses," *Florence Times*, 27 October 1931, 6.

<sup>103</sup> "The Muscle Shoals Mass Meeting," *Florence Times*, 27 November 1931, 1; and "Private Lease Favored for Shoals Plant," *Florence Times*, 10 December 1931, 1, 2.

<sup>104</sup> "Agrees on Shoals Measure," *Florence Times*, 18 February 1932, 1; and *Congressional Record* (House), 72<sup>nd</sup> Cong., 1<sup>st</sup> sess., 1932, 75, pt. 6: 6285. Hill's description came from a radio broadcast on the CBS Dixie network on 15 March 1932. His comparison referenced Germany's Ruhr Valley, the center of its industrial economy.

development of southern agriculture. A three-person board would lease the properties for fifty years to any company not tied to the power industry. Any part of Muscle Shoals that could be used to make fertilizer would be required to do so, and all profits from fertilizer sale would be limited to 8%. The lessee would be required to produce a minimum tonnage of nitrates, increasing to full capacity as soon as possible, and a board of government officials and farmers' representatives would oversee production, costs, and availability. In time of war, the president would be able to recover control for munitions production, an original requirement of the Shoals facilities. The bill also allowed for further appropriations for government developments on the Tennessee Valley that would increase the power capabilities at Wilson Dam and work towards flood control and navigation on the Tennessee River, specifically suggesting the construction of a dam at Cove Creek near Knoxville, Tennessee. Finally, the bill provided for government operation only if the board could not approve a lease after 18 months, and only to ensure that the plants actively produced plant food.<sup>105</sup>

The Hill Bill proved the “last gasp” for private operation – the final attempt by legislators to deal the dam and nitrate plants to an interested company. Hill’s legislation mirrored earlier attempts to lease the facilities to Ford and to American Cyanamid, with clauses dedicated to fertilizer production, profit limits, and public oversight. The legislation effectively dedicated the plants to southern agriculture, and Hill used nearly half of the bill to describe specific fertilizer requirements. Power companies were barred specifically from participating, a nod to the general animosity towards the “power trust” and Alabama Power, still under contract for power from the dam. The bill did call for larger river development, citing improvements like flood control and navigation, but additional dams would also increase the power at the plants, leading to additional production capabilities. The *Florence Times* called the bill a “triumph” for Hill, a “bill of rights”

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<sup>105</sup> H.R. 10887, 72<sup>nd</sup> Cong., 1<sup>st</sup> sess., printed 28 March 1932, in 33:56, Hill Papers, Hoole.

for the people, and a “bill of justice” for industries planning to return the benefits of the plants to agriculture. Hill told his colleagues that the bill would free the farmers from the international nitrate “cartel,” employ a population of thousands in Alabama and Tennessee, and serve as the “entering wedge for the development of the Valley.”<sup>106</sup> On May 5, 1932, the House passed the Hill Bill, which went to the Senate to face Norris and his plans for government operation of the plants.

Norris’s government operation bill passed the Senate in December 1931, a month after the Muscle Shoals Commission’s report recommended a bill for private operation of the plants. Since 1922, Norris’s leadership in the Senate ensured that the upper house remained a solid obstacle to private lease. The Hill Bill faced nearly impossible odds. The *Florence Times* called on Hugo Black to “fight ... the best fight of his life” against Norris and his “radical Senate group” in support of private operation.<sup>107</sup> Alabama’s junior senator, John H. Bankhead, Jr., admitted the coming difficulties to one concerned Florence voter. He outlined his strategy for combating Norris’s legislation. Bankhead planned first to vote provisions into the Norris Bill that would substitute private operation, and then to mobilize Democratic senators around the revised legislation. While he supported the Hill Bill’s provisions, he knew it would never pass the Senate, and he wanted something “workable” for Valley farmers. He told Hill as much in a letter asking for advice on moving legislation through the Senate, and Hill responded by promising cooperation, agreeing that the plants needed to go into immediate operation for the benefit of the region’s farmers.<sup>108</sup> Bankhead introduced an amendment in the Senate

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<sup>106</sup> “Hon. Lister Hill Adds another Laurel to His Crown,” *Florence Times*, 1 April 1932, 4; and Hill, “The Hill Bill for the Utilization of Muscle Shoals,” 4 May 1932 (United States Government Printing Office, 1932), 2-3, 7, in 33:56, Hill Papers, Hoole.

<sup>107</sup> “Senator Black’s Greatest Opportunity,” *Florence Times*, 6 May 1932, 4.

Agricultural Committee that would substitute similar terms as the Hill Bill in place of Norris's government operation bill, but the addition died before debate or voting took place. In the summer of 1932, the presidential contest between Hoover and Franklin D. Roosevelt changed the nature of the discussion over development at Muscle Shoals.

Roosevelt came to national politics with a proven record of supporting the public development of hydroelectric power. As governor of New York, he had wholeheartedly supported the public development of state waterways. The Democratic National Committee made waterpower an issue, stressing Roosevelt's belief that it belonged to the American public as a "fundamental principle." The Democratic Party *Campaign Book* instructed speakers to highlight planned legislation that would turn water power into energy and deliver it to the public at the lowest possible cost, allowing cities to erect their own power stations and distribution systems if private companies kept rates unreasonable.<sup>109</sup> The party platform, backed by Roosevelt's past support for public power, gave hope to those interested in the government operation of the facilities at Muscle Shoals. Judson King of the National Popular Government League (and later legal counsel for the Tennessee Valley Authority) came out in favor of Roosevelt as the candidate most likely to keep the public interest in mind by voting for the Norris Bill. King criticized Hoover for supporting the control of power by private interests and promised that Hoover would once again veto Muscle Shoals legislation if reelected.<sup>110</sup> Weeks before the election, Roosevelt visited Knoxville, Tennessee, and spoke of the vast natural resources of the region. Near the site of the proposed Cove Creek Dam, he made his views clear:

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<sup>108</sup> Bankhead to Lee Glenn, 12 May 1932; Bankhead to Hill, 17 May 1932; and Hill to Bankhead, 19 May 1932, 33:53, Hill Papers, Hoole.

<sup>109</sup> Democratic National Committee, *Campaign Book of the Democratic Party Candidates and Issues, 1932*, 7:6, William B. Bankhead Papers, ADAH.

<sup>110</sup> "Favors Roosevelt on Power Record," *New York Times*, 12 September 1932, 3.

“It is important to develop these sites for the small man, the consumer of electricity.”<sup>111</sup>

Roosevelt’s views on the potential of the region mirrored those of Norris. The future president promised the larger development of the Tennessee Valley. Where the Alabama delegation demanded fertilizer, Roosevelt stressed regional revitalization and electricity.

In January 1933, the president-elect stepped off a Southern Railway train at the Sheffield station platform, alongside a number of congressmen and state officials. Roosevelt was the first president to visit the region in almost 100 years, and the gathered “thongs” roared at the realization that “he was virtually promising them the operation of Muscle Shoals in the near future.” Roosevelt rode along a parade route leading to the nitrate plant, sitting alongside Governor Miller, Senators Bankhead and Black, and Representatives Almon and Hill. After touring the plants, Roosevelt proclaimed them ready to operate and left for photo opportunities at Wilson Dam. The *Florence Times* gushed: “It was the greatest day that this District and the Tennessee Valley have ever seen. It was the most portentous and impressive event that this District has ever known ... it marks the beginning of the carrying through of [Roosevelt’s] policies of development of great national projects, of which Muscle Shoals is a decade ahead of all others.”<sup>112</sup> Faced with the prospect of imminent economic growth, the *Times* returned to the fold of government operation, exchanging criticism of Norris for effusive praise of the incoming Roosevelt administration. Once again, the promise of operation outweighed past preferences.

Senator Black was similarly optimistic. He reminded the paper of his prediction that the election of a Democratic president would bring the operation of the Muscle Shoals plants within six days of the inauguration.<sup>113</sup> Roosevelt was more circumspect in his promises. In his speech

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<sup>111</sup> Raymond Clapper, “Roosevelt Hopes Visit Shoals After Election,” *Florence Times*, 24 October 1932, 1.

<sup>112</sup> “Roosevelt Promises to Put Muscle Shoals Back on the Map,” *Florence Times*, 21 January 1933, 1, 7.

at the Sheffield station, he told listeners that his trip was an opportunity to make an informed decision about the facility, and he called for his congressional contingent to help him “get something practical done.” Later at Florence, he called the plant a “nation-wide project” and expressed his hope that he would soon return to “find all of the great power possibilities of this Valley being used to its utmost.”<sup>114</sup>

The visit inspired the region, just as Ford’s visit in 1921 had encouraged the hope that the idle plants would soon be put to work. In an editorial in the *Florence Times*, A.B. Camper compared the visit to the American Revolution as an event that marked a turning point in the nation’s history. He wrote that the “agricultural people, in humble homes at humble firesides, might be freed from oppression” in the form of “indirect taxation which must be paid to a foreign nation” in order to purchase fertilizer for their farms. Cheap domestic fertilizer would not just be an act of economic relief for a struggling population – it would mark a “new day” and bring a wave of patriotic support to usher Roosevelt and the Democrats into office.<sup>115</sup> Camper voiced the sentiment of his fellow Tennessee Valley residents. After a decade and a half of waiting to see the benefits of the government plants on the Tennessee River, and after two vetoes that squashed hopes for nitrate production, a national leader made promises to the Valley with the political power to make them a reality.

Upon his return to Washington, the president-elect began working on a definite plan. The congressmen who had accompanied Roosevelt to the Valley hinted at his mindset. They described his view as river-wide development “more gigantic and on a scale far greater than that now proposed in legislation pending before the national legislature.” He promised to operate the

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<sup>113</sup> *Ibid.*

<sup>114</sup> “President-Elect Roosevelt’s Speeches at Shoals Today,” *Florence Times*, 21 January 1933, 1.

<sup>115</sup> Camper, “As We See It,” *Florence Times*, 21 January 1933, 4.

nitrate plants, but also a series of hydroelectric dams that would produce power, control annual flooding, and create a larger navigation channel. Roosevelt's plans would require millions in federal funds, but would employ 200,000 men and give work to thousands more as the Valley's industrial possibilities emerged. Frank Walsh, the Roosevelt-appointed chairman of the Power Authority of the State of New York, inspected the plants as well. Basing his opinions on New York's public power policies, Walsh promised that Roosevelt would "widen opportunities and promote the comfort of millions of families in their homes throughout the South."<sup>116</sup> The president-elect predicted that the project would "herald the birth of a new America, from which unemployment would be completely lifted." The scope of his plans for the Tennessee Valley went beyond even the broadest development envisioned by many of the proponents of government operation. His program included reforestation, land reclamation, hydroelectric development, flood control, navigation, and agricultural rehabilitation to balance rural and urban populations.<sup>117</sup> Norris freely admitted that Roosevelt's vision dwarfed his own plans, suggesting that the "gracious and gratifying" revitalization of the Tennessee Valley would make power cheap enough that "people won't even stop to turn it off in the daytime." Conceiving of the Tennessee River watershed as a regional unit, Roosevelt took Norris's ideas to their fullest conclusion.<sup>118</sup>

Standing on the steps of the Capitol, Franklin Roosevelt gave an inaugural address that rallied the American people to confront the Great Depression. He exhorted listeners to let go of the fear and terror that accompanied economic disaster and to look to a new generation of

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<sup>116</sup> "Congressional Leaders Declare for Tremendous Shoals Project," *Florence Times*, 26 January 1933, 1, 6. Walsh's comments were included in the *Congressional Record* by Robert LaFollette. See *Congressional Record* (Senate), 72<sup>nd</sup> Cong., 2<sup>nd</sup> sess., 1933, 76, pt. 4: 3708.

<sup>117</sup> "Tremendous Muscle Shoals Project Outlined by New Chief Executive," *Florence Times*, 2 February 1933, 1, 6.

<sup>118</sup> "G.O.P. Progressives Back Shoals Project," *Florence Times*, 3 February 1933, 1, 5.

political leaders who would prove better stewards of the country's bountiful resources. Roosevelt made no specific references to his comprehensive plan of development for the Tennessee Valley, but his goals were clearly in mind as he promised to put Americans to work, using the government to direct the projects that would utilize natural resources. He called for a rebalancing of the population, moving city-dwellers out of crowded urban areas and back onto the land, where revitalized farming techniques and intelligent land use practices would once again make agriculture profitable. Even as the Depression caused Americans to realize their interdependence, Roosevelt claimed a readiness to mobilize the population as he would an army in time of war. As if speaking directly to the people of the Valley, he promised: "I assume unhesitatingly the leadership of this great army of our people dedicated to a disciplined attack upon our common problems."<sup>119</sup> Here was a leader to force action on stale legislation and bring prosperity after more than a decade of failed promises.

The path forward was clear to those interested in the Muscle Shoals question. In the House, Hill abandoned private leasing and introduced legislation creating the "Muscle Shoals Corporation," a government organization that would operate the nitrate plants and oversee the development of the Tennessee River for "national defense, agricultural conservation, fertilizer production, navigation, flood control, power distribution, reforestation, industrial development, and unemployment relief."<sup>120</sup> His bill allowed the corporation to sell surplus power and specifically addressed the production of fertilizer at the plants, calling for the government to make any necessary changes to the facility to ensure that plant food became readily available.<sup>121</sup>

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<sup>119</sup> "Inaugural Speech of Franklin Delano Roosevelt," 4 March 1933, <<http://www.hpol.org/fdr/inaug/>>, accessed 18 September 2008.

<sup>120</sup> H.R. 1609, 73<sup>rd</sup> Cong., 1<sup>st</sup> sess., 9 March 1933, 1-2, 33:58, Hill Papers, Hoole.

<sup>121</sup> *Ibid.*, 7-9, 10, 13

Under Hill's legislation, the corporation acted much like a private company, producing and selling both power and fertilizer. In particular, Hill wanted to ensure that government operation would preserve the use of the plants for fertilizer production. He even made provision for contracts with private fertilizer companies if the government corporation could not meet farmers' demands. He received encouragement from the Valley. Joseph H. Nathan, president of the Sheffield Chamber of Commerce, wrote to Roosevelt in favor of Hill's legislation, since it alone preserved the original purpose of the Muscle Shoals plants – the creation and distribution of plant food for southern farmers.<sup>122</sup>

In the Senate, Norris produced his own government operation bill. His Muscle Shoals Corporation operated much like Hill's, though with some important exceptions. Where Hill had been willing to work within the private sphere on fertilizer sale and power distribution (Hill's corporation leased existing transmission lines), Norris demanded unhampered public operation of both power and fertilizer facilities. Skeptical of the capabilities of the plants at Muscle Shoals, Norris's legislation called for experimentation with the existing equipment and production techniques in order to determine if fertilizer could be made for reasonable prices. He felt Hill's legislation exceedingly reckless in its use of federal money to add to the nitrate plants. Instead of working to preserve the government's investment, Hill required the proposed government agency to use outdated processes and build new facilities to fulfill fertilizer guarantees that might prove unrealistic. Norris believed that his corporation needed the authority to build its own transmission lines to set cheap rates and make power more widely available.<sup>123</sup>

Hill's bill exhibited the continuing influence of the Valley's demand for agricultural

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<sup>122</sup> Nathan to Roosevelt, 5 April 1933, 33:58, Hill Papers, Hoole.

<sup>123</sup> S.J.R. 4, 73<sup>rd</sup> Cong., 1<sup>st</sup> sess., 9 March 1933, in 32:2, Hill Papers, Hoole. Norris gives his views of Hill's Bill in the *Congressional Record* later on in the debate. See *Congressional Record* (Senate), 73<sup>rd</sup> Cong., 1<sup>st</sup> sess., 1933, 77, pt. 3: 2635-9.

revitalization and the predilection among many legislators to include aspects of private operation in the final decision. Buoyed by support from Roosevelt, Norris put forward his strongest plan for government operation, using public funds to develop an entire region with as little reliance on (or cooperation with) private industry as possible.

In April, Roosevelt sent an impassioned message to Congress, suggesting the creation of a government corporation called the Tennessee Valley Authority (TVA). The project at Muscle Shoals made up only a small part of the larger potential inherent in the Valley, he argued, and those who focused simply on fertilizer or power excluded many of the other goals he envisioned for the region's development. TVA was "a corporation clothed with the power of Government but possessed of the flexibility and initiative of a private industry."<sup>124</sup> Roosevelt gave a brief background of his own experience and mentioned Norris as his inspiration for a regional development based in the Tennessee Valley.<sup>125</sup> Norris's bill fit squarely in the mold laid by the president, and Hill's followed the basic outlines, though its differences on fertilizer production and power facilities gave ample room for debate. Within days of Roosevelt's message, Hill's Bill passed the House. When it reached the Senate, though, Norris struck everything after Hill's enacting clause and substituted his own bill, which the body quickly adopted. The bill came back to the House, where the differences between the two bills became points of real contention, particularly Hill's restrictions on government construction of transmission lines. Roosevelt once again intervened, holding a conference with House and Senate leaders, resulting in a compromise

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<sup>124</sup> "A Suggestion for Legislation to Create the Tennessee Valley Authority," 10 April 1933, in Roosevelt, *The Public Papers and Addresses of Franklin D. Roosevelt, Vol. 2: The Year of Crisis, 1933* (New York: Random House, 1938), 122.

<sup>125</sup> *Ibid.*, 123.

bill that went before both Houses. On May 16 and 17, the bill passed the Senate and House. On May 18, Roosevelt signed the bill into law, creating the Tennessee Valley Authority.<sup>126</sup>

From the outset, the TVA Act called for the maintenance and operation of the facilities at Muscle Shoals for national defense, “agricultural and industrial development,” navigation, and flood control. A three-man Board of Directors governed Authority actions. Incorporating Hill’s desire for fertilizer, the Act called for the Board to work with commercial fertilizer producers to help acquire and develop fertilizers. The Board also worked to educate farmers about new products and cooperate in experiments and demonstration farms. The Board could sell surplus power to government and private entities and build transmission lines, but only where towns were not already being supplied under reasonable rates. The government would issue bonds to help defray the cost of building new dams and facilities, and the Act specifically called for the construction of a dam at Cove Creek. The Act provided the Authority with the right of eminent domain, an important clause that allowed TVA to condemn land, relocate roads, highways, electric plants “and any and all other properties, enterprises, and projects whose removal may be necessary” in the cause of greater development.<sup>127</sup>

In its final form, the Act empowered the federal government to intervene in the private sector in an unprecedented manner. The government produced power and sold it to interested parties, and it worked with private utilities to transmit its power over private lines. It operated the nitrate plants and produced fertilizer, then marketed the product to local farmers. The development plan envisioned in the TVA Act encompassed a remarkable array of projects: flood control, navigation, power production, land reclamation, reforestation, agricultural instruction in

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<sup>126</sup> For a more detailed discussion of the TVA bill, see Hubbard, *Origins of the TVA*.

<sup>127</sup> H.R. 5081, 73<sup>rd</sup> Cong., 1<sup>st</sup> sess., 18 May 1933, 223, in George McJimsey, ed., *Documentary History of the Franklin D. Roosevelt Presidency, Vol. 28: Promulgation of the Tennessee Valley Authority* (LexisNexis, 2006), Document 58, 213-227.

land use and soil revitalization, industrial development, and job creation. The legislation certainly exceeded the original plan for development along the Tennessee River, the National Defense Act of 1916 that called for a single hydroelectric dam and nitrate facilities. In its immensity, the TVA Act also surpassed the imagination of the people of Muscle Shoals, promising a bright future in the midst of a deep depression.

The people of the Valley were overjoyed. Residents organized “the wildest celebration of all time,” even bigger than the armistice celebration at the end of the Great War. The leaders of the Tri-Cities, expecting legislative success, planned a parade of floats illustrating the history of the development at Muscle Shoals. The lead float, manned by a troop of Boy Scouts dressed in Native American attire, represented life on the untamed river. They were followed by engineers and soldiers beginning the construction of Wilson Dam in 1917. Next, a Model-T Ford festooned with signs reading “Buy Lots Now” and “Invest in Real Estate” marked the height of the Ford bid and the real estate boom, contrasted by the proceeding “Muscle Shoals in Its Grave” dominated by a personification of “Old Man Depression.” The final float represented the success of the TVA Act. Entitled “The New Day,” the characters of “Justice” and “Prosperity” flanked the completed Wilson Dam with a rising sun and a picture of Roosevelt. Another rider held a representation of the signed Act, and the “Scrap Iron Quartet” sang “Happy Days Are Here Again” and “Sweet Adeline.” Following the floats, fire trucks, local merchants, city officials, and average citizens marched from Sheffield to Tuscumbia, then on to Muscle Shoals City and across the top of Wilson Dam to Florence.<sup>128</sup> After fifteen years, North Alabamians finally had reason to celebrate.

Hardly an innovation of the New Deal, the Tennessee Valley Authority embodied the give and take of the decade-and-a-half discussion over the future of development in the

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<sup>128</sup> “Muscle Shoals to Have Fire Works, Parade,” *Florence Times*, 18 May 1933, 5.

Tennessee Valley, centered on the nitrate plants and hydroelectric dam at Muscle Shoals. In its earliest manifestation, the North Alabama project looked to use federal funds to produce nitrates, making munitions during wartime and fertilizers for southern farmers in times of peace. The dam provided power for the plants, drawing on the Tennessee River and opening navigation possibilities at the rocky shoals that gave the region its name.

In the final Act, the properties served much the same purpose. Wilson Dam powered the Muscle Shoals nitrate plants, which produced ammonium nitrate for use as plant food. This was central to the demands of Alabamians who called for the use of the facilities for the revitalization of southern agriculture. When Roosevelt promised a renewed commitment to agriculture, he echoed the desires of many in the Valley for assistance to farmers struggling to make a profit. As cotton prices declined, Valley farmers hoped that cheaper, accessible fertilizers would increase their yield. More progressive agriculturalists hoped that fertilizer would open up new land for pastures, livestock, and more diverse food crops, ending the cotton monoculture that kept the farm economy depressed. As enacted, TVA envisioned a larger agricultural program than fertilizer distribution and in its first decade, it truly worked to improve the soil of the South, to teach farmers advanced farming techniques like terracing and crop rotation, and to improve the home lives of southern tenants and sharecroppers (see chapter 3). Yet even in its breadth, TVA's farm program grew out of the debate over the purpose of the government project at Muscle Shoals, and the arguments of Hill, Heflin, and Underwood were clearly present in the final legislation.

In Florence, leading citizens expressed a different vision for development at Muscle Shoals. Impatient with an endless congressional debate over the plants, the city began its own program of growth, hoping to bring in industries that would raise employment and encourage

regional commerce. The city's leadership attracted industries employing a few thousand workers, but the inactivity at the nitrate plants was a constant reminder of the uncertain nature of government investment. Roosevelt also wanted to create jobs in the Valley, and in particular, saw the cheap power produced at Wilson as an important resource for attracting industry. TVA operated the plants, and the construction of additional dams put local men to work on a large scale. Initially, the Authority shied away from direct industrial development, instead focusing on conserving the region's resources in hopes that local business might grow to meet its perceived potential. As the years passed, however, the agency gravitated towards industrial attraction, working with groups like Florence's chamber of commerce in order to advance the cause of economic development. In that transition, the TVA created a new debate about the future of the Valley as a center for agriculture and industry.

In retrospect, the final years of debate over Muscle Shoals tell as much about the developmental mindset of North Alabama as they tell about the TVA. The population of the Valley supported economic growth that would bring assistance to struggling farmers and development to Valley communities, regardless of the origins of that progress. When Ford entered the debate, most Alabamians called for private development, yet their views were shaped largely by expedience, not some underlying ideology. In fact, the almost wholesale rejection of Alabama Power in the late 1920s proved that many Alabamians distrusted the private sector and its tendency towards monopoly as much as they questioned an expansive federal government. The region again and again proved willing to compromise in favor of operating the nitrate plants and taming the Tennessee River. Norris's fight, Roosevelt's election, and the creation of the TVA did not solve the Valley's problems overnight. Farmers still struggled to eke out a living, city leaders worked to encourage industries to relocate to the South, and water continued to flow

unchecked and unharnessed. Yet the success did begin to address the region's shortcomings, and perhaps more importantly, provided the means by which Valley leaders began to build a modern economy.

## CHAPTER 3

### “An Awakened and Enlightened Community”: The Tennessee Valley Authority, 1933-1938

What we are doing there is taking a watershed with about three and a half million people in it, almost all of them rural, and we are trying to make a different type of citizen out of them, not what they would be under their present conditions.<sup>1</sup>

In 1935, Waterloo was a “sprawling country town” situated on the northern bank of the Tennessee River in the northwest corner of Alabama. Waterloo’s economy revolved around farming, specifically the cultivation of the fertile bottomland occasionally flooded by the river. In the hills behind the town, woodlands provided a base for the region’s lumber processing mills, though by the 1930s, indiscriminate cutting had begun to deplete timber stocks. A small highway ran along the river to Florence and served as the city’s lifeline, connecting its residents to shops and services while providing access to markets for farm and timber products.<sup>2</sup> Waterloo was fairly typical of southern agricultural communities in the early twentieth century. Some farmers owned their land, but most agricultural workers were either tenants renting land to cultivate their crops, sharecroppers farming for a share of the harvest, or laborers working for a

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<sup>1</sup> “Press Conference #160,” 23 November 1934, 4: 214, in Franklin D. Roosevelt, *Complete Presidential Press Conferences of Franklin D. Roosevelt*, Volumes 3-4 (New York: Da Capo Press, 1972). Title quote from Population Readjustment Division, Reservoir Property Management Department, “Population Readjustment: Guntersville Area,” June 1940, 2-3, 2: “Studies and Reports – Guntersville Area [1],” Family Removal and Population Readjustment Case Records, Reservoir Property Management Division (Removal Records), TVA Records, NARASE.

<sup>2</sup> TVA, Department of Regional Planning Studies, Land Planning Division, Harold V. Miller, “A Review of Economic Conditions in Waterloo, Alabama, Following Reservoir Construction,” 23 May 1940, i-ii, 219: “901.041-6 Guntersville,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

wage. George Qualls, for example made \$50 per year in wages as a laborer, enough to own 25 acres, and he supplemented his pay by renting out four of his holdings to other farmers.<sup>3</sup> Emmet Jones sharecropped a 2-horse plot in the Waterloo area for 39 years, and after 18 years of farming, he finally paid off the house he shared with his wife and two children. His landlord, Ben Lee, exemplified the small band of owners who dominated community politics. A landowner, land trader, and businessman, Lee was widely considered to be “a relatively well-to-do man.”<sup>4</sup> Jennie Culver oversaw the land of her son, Ezra, then living in New York. In return for managing the tenant who worked the land, Culver received a share of the produce, which proved to be her main source of food.<sup>5</sup> Cotton cultivation supported a number of associated concerns as well, including several sawmills and basic city services.<sup>6</sup>

Others in Waterloo drew their livelihood from the wooded hills. The upland soil was poor, especially in comparison to the rich bottomland, so only small gardens and subsistence plots proved economically viable. The hardwood forests supplied area lumber mills, employing a number of people as operators and cutters. W.E. Haynes and his adult sons worked at Martin’s Lumber Mill for ten dollars per day, taking the positions after their own lumber mill failed. The timber industry provided an outlet for those who found farming unproductive. Warden Austin worked as a tenant farmer before getting a job with Republic Creosoting Company, a lumber treatment plant, though after losing one finger and breaking another in an accident, his work

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<sup>3</sup> TVA, Social and Economic Division, Survey of Families, Schedule 0499, George Qualls, 17 September 1935, 74: “3 Lauderdale Co., Qualls-Young,” Removal Records, TVA Records, NARASE.

<sup>4</sup> TVA Removal Information Form, Emmet Jones, 14 September 1936; and TVA Removal Information Form, Lee, Ben, 25 September 1936, 79: “Folder 2 of 4,” Removal Records, TVA Records, NARASE.

<sup>5</sup> TVA, Removal Information Form, Mrs. Jennie Culver, 10 September 1936, in 79: “Case Records, Special Survey, Wright, AL, Waterloo, AL, Folder 1 of 4 Folders,” Removal Records, TVA Records, NARASE.

<sup>6</sup> TVA, Removal Information Form, Hiram Richardson, 23 September 1936; and TVA Removal Information Form, Potts, J.C., undated, 79: “Folder 3 of 4,” Removal Records, TVA Records, NARASE.

became irregular.<sup>7</sup> The town had a number of churches and a few schools for black and white students, and ministers and teachers rounded out the non-farm workers in the community.<sup>8</sup> Waterloo relied heavily on its natural resources, exporting cotton and timber in return for the wages that drove the cities' businesses and services. Its proximity and highway connection to Florence allowed its residents to access wider markets and healthcare when necessary, but the town clearly saw itself as a self-contained community, relying on its resources, both natural and human, to create a way of life along the Tennessee River.

Change came in 1935 when officials from the Tennessee Valley Authority began interviewing residents in preparation for a land acquisition campaign associated with the planned construction of Pickwick Dam and Reservoir. The dam itself would be located across the state line in Tennessee, but the reservoir would largely affect Alabama's Lauderdale and Colbert Counties. Along the rich bottomlands, rising water levels would subsume Waterloo's low-lying farms and homes along the river. As TVA mapped out the future Pickwick Lake, officials and local residents began to comprehend the extent of the transformation. TVA's Reservoir Property Management Division, which conducted interviews with every family affected by the agency's reservoir program, made a special effort in Waterloo, taking a broad sampling of residents, including those not directly affected by the rising water level. Their findings, gathered between 1935 and 1937 and eventually collected in a 1940 report, provide a concise view of the promise and problems associated with TVA's program in the Valley.

From the outset, Waterloo residents had mixed feelings about the economic future of their community. When informed of the coming changes, some remained optimistic about the

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<sup>7</sup> TVA Removal Information Form, Warden Austin, 18 September 1936, 79: "Case Records, Special Survey, Wright, AL, Waterloo, AL, Folder 1 of 4 Folders," Removal Records, TVA Records, NARASE.

<sup>8</sup> TVA, Removal Information Form, J. Leonard Fisher, 9 September 1936, *ibid.*; and TVA, Removal Information Form, Wm. Wilson, 10 September 1936, 79: "Folder 4 of 4," Removal Records, TVA Records, NARASE.

possibility of staying employed or finding a new job. W.E. Haynes, the sawmill worker, believed he could find a new job somewhere else “without sacrifice.”<sup>9</sup> Mail carrier J.C. Potts understood that the flooding would effectively end his route, but he was sure that he would receive another.<sup>10</sup> The county school superintendent saw the change as an opportunity to shuffle system resources, removing an abandoned school from the flood zone to use as either a school for black students or as a teacher’s residence in Waterloo.<sup>11</sup> English teacher William Wilson voiced the views of the town’s optimists most succinctly. Waterloo, he claimed, would be able to “readjust and sustain itself” if the town’s citizens “open[ed] their minds to new ideas” like diversified farming and raising livestock.<sup>12</sup>

At the end of his interview, Wilson noted that his view “differs from that of most of the citizens of the town.” In fact, many in Waterloo saw TVA’s arrival as the town’s death knell. Flood waters would cover the town’s most productive farmland, leaving the majority of farmers, tenants, sharecroppers, and laborers out of work. Without cash, the town’s stores would close and the population would face unemployment, relocation, or outmigration. Warden Austin told TVA officials that he would love to continue farming, but would not be able to do so at his current location. Presbyterian minister J. Leonard Fisher confided that he would probably be transferred elsewhere, since most of his congregation would be forced to leave the community,

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<sup>9</sup> TVA, Removal Information Form, W.E. Haynes, 23 September 1936, in Box 79: “Case Records, Special Survey, Wright, AL, Waterloo, AL, Folder 1 of 4 Folders,” Removal Records, TVA Records, NARASE.

<sup>10</sup> TVA, Removal Information Form, J.C. Potts, undated, 79: “Folder 3 of 4,” Removal Records, TVA Records, NARASE.

<sup>11</sup> TVA, Removal Information Form, Panther Creek School, 10 June 1936, in 84: “Case Files – Northcutt, Laura thru Parrish, Will,” Removal Records, TVA Records, NARASE.

<sup>12</sup> TVA, Removal Information Form, Wilson, Removal Records, TVA Records, NARASE.

and frankly told TVA officials that the agency should purchase the town site and bring in industries to revitalize the area economy.<sup>13</sup>

Many agreed with Minister Fisher. Realizing that agriculture would no longer be profitable in the community, a number of the town's citizens called on the TVA to bring in industry and provide at least part-time work for former full-time farmers. Mrs. Culver told her interviewer that she was "very dissatisfied" with TVA policy and called for industrialization to put men (including her sons) to work. Sanford Higgins, a lifelong farmer, was hesitant to leave the land, but said he would if "other work is available for him in the future." If not, Higgins would have to "sell his home in Waterloo and relocate."<sup>14</sup> Landowner Ben Lee would not be able to stay on his property, since so much tillable land would be lost, though he had enough of his own resources to relocate satisfactorily. His case worker gave a frank assessment of Lee's attitude towards the Authority: "[He] is one of the Waterloo residents whose [actions] would be valuable in the readjustment of the community. Mr. Lee, however, is very pessimistic concerning the future of the town, and it would be difficult to convince him that it is possible for the citizens to readjust the community with their own resources."<sup>15</sup> His tenant, Emmet Jones, faced the prospect of selling or renting the farm he spent eighteen years working to make his own. With the town facing a drastic reduction of available farmland, the decrease in property values would make Jones's ability to dispose of his property almost impossible.<sup>16</sup>

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<sup>13</sup> TVA, Removal Information Form, Fisher, Removal Records, TVA Records, NARASE.

<sup>14</sup> TVA, Removal Information Form, Culver, Removal Records, TVA Records, NARASE; and TVA, Removal Information Form, Sanford Higgins, 10 September 1936, 79: "Case Records, Special Survey, Wright, AL, Waterloo, AL, Folder 1 of 4 Folders," Removal Records, TVA Records, NARASE.

<sup>15</sup> TVA, Removal Information Form, Ben Lee, 25 September 1936, 79: "Folder 2 of 4," Removal Records, TVA Records, NARASE.

<sup>16</sup> TVA Removal Information Form, Emmet Jones, Removal Records, TVA Records, NARASE.

The situation at Waterloo provided a real challenge for TVA. The agency promised to improve the way of life of people in the Valley, yet the dams and reservoirs that brought flood control, navigation, and power to the area also caused drastic change for those living along the river. Writing to Representative John Sparkman, TVA's general manager, John B. Blandford, Jr., assessed the problem, quoting a letter from TVA Board member Harcourt A. Morgan to President Franklin D. Roosevelt. Despite TVA's "extraordinary effort" to help people readjust, the situation at Waterloo had become "unsatisfactory." TVA planned to work with "responsible farmers" and, within a couple of years, have programs in place to make new land available for the agricultural economy. TVA contacted a number of local and national farmers groups, including the U.S. Department of Agriculture and the State Extension Service at Alabama Polytechnic Institute (later Auburn University) to work with people of the community. TVA officials predicted that the town would soon enjoy improved transportation, industrial and commercial development, and employment in recreation that would bring paychecks back to the region. Yet despite government assurances, the real test would lie with the residents themselves. As Morgan noted: "The success of all these efforts . . . will depend largely upon the adaptability and cooperative spirit of the people in Waterloo."<sup>17</sup>

Two years later, Morgan's realistic assessment of the changed community replaced his cautious confidence. TVA flooded Waterloo in 1938, three years after the initial surveys found a mix of hopefulness and pessimism about the town's future. By 1940, the town's optimists had gone silent. TVA purchased 22 houses, a church, a cotton gin, a sawmill, and a small shop, together making up 20% of the town. The population declined from 576 in 1935 to 475 in 1940, and fully 60% of the remaining heads of family in the town were unemployed. Agriculture

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<sup>17</sup> Blandford to Sparkman, 17 June 1938, 94: "032.11 Sparkman, John," Office of the General Manager, Records of the Board of Directors, Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

became nearly nonexistent, as bottomlands disappeared and farming failed to take hold in the upland hills. The timber industry became anemic, as unrestrained cutting depleted nearly all of the saleable lumber. Even more damaging was the flooding of the main highway connection to Florence. A newly constructed replacement road bypassed Waterloo by several miles.<sup>18</sup> Out of the sample of 100 families, the number employed in agriculture dropped from 63 to 6, and the removal of the town's only cotton gin made cotton cultivation completely unprofitable. The timber industry employed only seven heads of family full time; there was little hope for continued success with declining numbers of merchantable trees and decreasing transportation options.<sup>19</sup> Retail sales fell by 50% and merchants lowered prices to attract business, leading many to travel to Florence to sell products that once found a local market. Where Waterloo once drew business from the entire western portion of Lauderdale County and parts of Tennessee's Hardin and Wayne Counties, by 1940, the trade area had shrunk to six square miles.<sup>20</sup> Property values dropped over 50% due to the lack of economic opportunity, and the number of residents on government relief jumped from 8% to 36%. The school population increased, thanks to the consolidation of a number of outlying schools, and attendance became more regular, if only because fewer students left class to work in the fields.<sup>21</sup> The city found itself unable to maintain its city hall, and local government occasionally met at the local barber shop. The only paid official was the town constable, making up the one remaining city service.<sup>22</sup>

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<sup>18</sup> Miller, "A Review of Economic Conditions in Waterloo, Alabama, Following Reservoir Construction," i-ii.

<sup>19</sup> *Ibid.*, 3, 6.

<sup>20</sup> *Ibid.*, 7-8.

<sup>21</sup> *Ibid.*, 10-12.

<sup>22</sup> *Ibid.*, 13-14.

Despite the disheartening statistics, the TVA report found the unquantifiable changes the most profound. Officials commented on the “all-pervading pessimism and defeatist attitude of the people in the area.”<sup>23</sup> Over a span of five years, Waterloo residents witnessed the destruction of their way of life. For all of the promise of TVA and its plan for intelligent resource use, farmers watched Pickwick Reservoir cover their city’s most valuable resource. Those with means left for other areas, but many could not afford to relocate. Families struggled to grow crops in the hills, cut retail prices to keep their stores afloat, or turned to the government for assistance. Their pessimism was hardly surprising, but the situation at Waterloo gave TVA a foreboding example of the challenges inherent in their program for the Valley.

In its first years of existence, the Tennessee Valley Authority struggled to define its mission. Roosevelt and the Authority’s legislative “father,” Senator George Norris, clearly intended the agency as a broad-reaching solution to the economic stagnation of the South, based largely on the utilization of the region’s natural resources in a balanced program of industrial and agricultural development. The federal government mobilized its resources to work with farmers, community leaders, and businessmen in order to diversify an economy founded on the cultivation and rudimentary processing of cotton. Dams along the Tennessee River provided a navigable channel to carry goods to market; controlled seasonal flooding to prevent damage to homes and businesses; and electrified homes, farms, and the fledgling industries that gave jobs to farmers struggling to make ends meet. The program was ambitious, to say the least, and its broad goals left much room for debate and dissent over the direction of economic development. As residents watched the Valley transform, they questioned the continued feasibility of farming. Water covered the best farmland and encouraged by agency officials, many residents moved to towns and cities looking for industrial jobs. TVA began its program

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<sup>23</sup> *Ibid.*, 4.

with an attempt to control local resources and revitalize the regional economy. In doing so, the agency forced residents to reconsider their financial future. By the late 1930s and early 1940s, many residents joined with Valley leaders to demand a new, industrial role for the Authority.

As the situation at Waterloo suggests, TVA relied heavily on the cooperation of Valley residents to pursue its wide-ranging goals. Therefore, the relationship between the TVA Board in Knoxville, Tennessee, and local leaders in cities such as Decatur and Florence became an important factor in the relative success or failure of the agency's work. As Waterloo's experience also shows, Valley residents imagined community development in ways that sometimes differed drastically from those of government officials. As TVA built dams and flooded land, worked with farm agencies and local businesses, and cooperated with cities to bring improvements, Valley residents pursued their own vision of the future, demanding immediate relief in the face of TVA's more long-range goals. In Decatur, one of the largest cities in North Alabama in the 1930s, the work of *Decatur Daily* editor Barrett Shelton helped to push TVA in a new direction, sharing a vision of the region's economic future with TVA Board member and future chairman, David E. Lilienthal, who shifted the Authority from a diverse range of social and economic goals to directed industrial development. Lilienthal built closer ties with local leaders whose desire to bring in jobs and share in the defense boom fit his own goals for the federal agency. Less than a decade after its birth, TVA abandoned balanced, diversified development in favor of industrial growth. In doing so, it colored the future of the South's economy in profound ways.

On May 26, 1933, weeks after the TVA Act was signed into law, the Authority's new chairman, Arthur E. Morgan, visited the fertilizer plants at Muscle Shoals and outlined his vision

for the Valley. Morgan left his position as president of Antioch College just outside of Dayton, Ohio, to lead the new federal agency. At Antioch, he worked to create what one historian called an “educational utopia,” where students balanced study with work in local farms and factories. The school became an example of the community Morgan hoped to build in the Tennessee Valley. He wanted to improve society through education and labor, working to return the benefits of employment to the larger community.<sup>24</sup> Morgan’s planned community at Norris Dam proved the culmination of this grand idealistic vision. The chairman boasted a more practical background in engineering, but he never abandoned his idealistic goals for the Valley. Directing flood control projects on the Miami River in Ohio gave him the experience needed for similar hydroelectric projects along the Tennessee.

Morgan promised that TVA’s first decision would address the future of the nitrate plants. Even as he planned for the renovation of the plants, however, Morgan insisted on exploring the larger consequences of utilizing Muscle Shoals. TVA hoped to bring economic development by growing small industries that would allow farmers to work on their farms in the summer and in factories during winter. In his own didactic style, Morgan promised to “develop the social side of the people and raise the standard of living generally.” He wanted TVA to “teach the American people in the rural communities how to live.”<sup>25</sup> Morgan envisioned a new social and economic order for the Valley. He argued that cities were becoming overpopulated, and that many would soon return to the countryside looking for jobs. He refused to see the problem as one of simple economics. The culture of the people was integral to the project’s success, and to change the economic base of the Valley was to change its inherent culture. Morgan hoped TVA

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<sup>24</sup> Amity Shlaes, *The Forgotten Man: A New History of the Great Depression* (New York: Harper Perennial, 2007), 177, 179.

<sup>25</sup> “Morgan Visits Muscle Shoals,” *Florence Times*, 26 May 1933, 1, 6.

would “distribute the sense of social responsibility among the people.”<sup>26</sup> His son, Ernst, recalled that Morgan realized that “technical engineering and physical engineering without human engineering” precluded real change. Otherwise, he remembered his father saying, “[M]aybe you’d better leave the land to the mosquitos.” TVA provided an opportunity for him to prove this maxim. As Ernst recalled, Morgan understood that “[y]ou need a lot more than just dams and dredging to [make] a culture.”<sup>27</sup>

As he considered the wider implications of the agency, the chairman’s rhetoric became increasingly idealistic. He believed that the TVA would completely remake the Valley, creating a newly organized citizenry ready to better themselves and their communities. Living on profitable farms near small, community-based industries, the residents of the Valley would be healthier and wealthier – a living example of how the federal government could revitalize the area through careful planning and resource development.

Physically, this meant the construction of a series of dams along the Tennessee River to improve navigation and flood control while producing electricity for domestic and industrial use. Yet Morgan foresaw a greater transformation. Early in 1934, he proposed the creation of a department within TVA to organize manpower surveys, outline methods for organization and hiring, and employ field officers to recruit work candidates throughout the Valley.<sup>28</sup> Like Roosevelt, Morgan understood the importance of relief, particularly work relief, as part of the agency’s mission. Morgan pushed the Board to vote on the construction of Dam 3 as an “emergency employment relief measure.” He worked with Harold Ickes at the Department of

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<sup>26</sup> “Authority Moves on Power,” *Florence Times*, 25 July 1933, 1, 3.

<sup>27</sup> Mark Winter, interview with Ernst Morgan, 6 April 1983, 4, 7: “Morgan, Ernst A.,” Oral History Records, 1965-1993 (Oral History Records), TVA Records, NARASE.

<sup>28</sup> Morgan, “Suggested Plan of Organization for the Training and Educational Program,” 13 February 1934, 9: “Organization of Training Program,” A.E. Morgan Papers, TVA Records, NARASE.

the Interior to get funds for construction, and his efforts won praise from the Valley. The *Florence Times* noted that the area had “thousands of people ... begging for jobs at which to make an honest living.”<sup>29</sup> By November, work had begun on both “Norris Dam” (the new name of the Cove Creek Dam near Knoxville) and Dam 3 (later dedicated “Joseph Wheeler Dam” after a North Alabama Civil War hero). Morgan announced that the Civil Works Authority set aside \$3,343,000 to employ 16,500 workers on Valley projects, in addition to those already on the job at the Muscle Shoals nitrate plants. Workers were placed on several projects in the watershed at Wheeler and Norris, including reforestation, erosion, road construction, malaria control, and other miscellaneous programs under the TVA umbrella.<sup>30</sup> Morgan viewed employment on dam construction and other emergency jobs as the first step in the Valley’s transformation. In a speech in Huntsville, the chairman told his audience that the “fine” working force on the dams was the “raw material for industrial leadership.”<sup>31</sup> TVA’s assistance was temporary, providing direction to the workers, then stepping back to let the labor force develop on its own.

Echoing contemporary social scientists, Morgan promised to rid the region of a “rugged individualism” that had hampered the cooperation and communal connections that encouraged development. Morgan saw a bright future for the Valley: “With a virile and ambitious population, with the remaining vestiges of the great forests, with minerals, clays and pigments, and with cheap power, it should be possible to bring about a prosperous economy which will

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<sup>29</sup> “TVA Favors Building of Dam Three,” *Florence Times*, 22 September 1933, 1; Ickes to Morgan, 9 October 1933, 3; “White House Correspondence, 1933,” A.E. Morgan Papers, TVA Records, NARASE; and “Let’s Build Dam Three!” *Florence Times*, 15 September 1933, 2.

<sup>30</sup> “TVA to Hire 16,500 Men with CWA Funds,” *Florence Times*, 5 December 1933, 1, 3.

<sup>31</sup> Morgan, “Self-Sufficiency,” 18 May 1934, Huntsville, 1: “Distribution of Industry,” Records of the Chairmen and Members of the Board of Directors of TVA, Records of A.E. Morgan, Subject Index to Speeches, 1933-38 (A.E. Morgan Speech Files), TVA Records, NARASE.

make such communities not only self supporting, but a strength and support to the nation.”<sup>32</sup> The key, in Morgan’s view, was cooperation between various public agencies, between public and private organizations, and between groups of people inside and outside the Valley. This mutuality created a “human spirit” that came from a group of people aware of the problems in their society and ready to address them to realize prosperity.<sup>33</sup> He believed that private industry alone could never bring such success. Pointing to the corruption in the private market, Morgan argued that the unceasing search for profits precluded development. The utilities, with their potential for the kind of regional work to which TVA aspired, failed due to their quest for profits. In fact, for Morgan, many of the problems the South faced could be attributed to the inability of private industry to restrain itself. He specifically noted soil erosion, which had wasted regions of the South, leaving “barrenness and poverty.”<sup>34</sup> Through cooperation, public and private enterprise worked together to bring industry and more intelligent agricultural practices to a needy public.

This extended to the community level as well. Communal cooperation created a degree of self-sufficiency that ensured balanced growth. Cotton monoculture represented the worst aspects of “rugged individualism,” the overriding belief in self-reliance that led southerners to seek profit regardless of consequence. Morgan argued that this resulted in a lack of resource control, a population “stranded ... in poverty and despair,” soil erosion, and wasted

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<sup>32</sup> Morgan, “The Valley Region Physical Characteristics,” 21 May 1934, NBC Radio Address, 2: “Social and Economic Planning,” A.E. Morgan Speech Files, TVA Records, NARASE.

<sup>33</sup> Morgan, “Essentials for a Lasting Civilization,” 18 October 1934, Memphis, 1: “Social Planning,” A.E. Morgan Speech Files, TVA Records, NARASE.

<sup>34</sup> Morgan, “Government in Business: Public versus Private Ownership,” 13 October 1934, Chicago, in 1: “Government,” A.E. Morgan Speech Files, TVA Records, NARASE; and Morgan, “Advantages of Valley Region,” 6 October 1934, 2: “Social Plan,” A.E. Morgan Speech Files, TVA Records, NARASE.

horsepower.<sup>35</sup> He told farmers in East Tennessee to stop competing with each other to cultivate more crops in hilly land. Instead, farmers should wait on power to reach their farms, so that they could create “a little factory in the barn by plugging into [the] wall.”<sup>36</sup> Home-based industries would help produce the goods needed in communities, provide an employment outlet for overtaxed farmland, and bring income into the region. To this end, Morgan encouraged the production and sale of handicrafts, community self-help and “the restoration of lost folkways.”<sup>37</sup> Giving up individualism, Valley residents would learn to work as a community, meeting each others’ needs while creating a foundation that would allow them to participate in the national economy. The program would begin with recovery, employing men on dams and other work projects, but those jobs would train laborers for their larger calling, as part-time farmers and part-time workers. More than any other Board member, Arthur Morgan truly saw TVA as a regional experiment. Self-sufficient communities working together would provide a clear example of the power of the federal government to better lives through careful organization and planning.

The president’s vision for TVA fit largely with Morgan’s, at least initially. In his fourth “fireside chat,” Roosevelt drew on Biblical allusions to illustrate his desire for a new American economy. The “edifice of recovery” created by his New Deal would “no longer be a temple of money changers or of beggars, but rather a temple dedicated to and maintained for a greater social justice, a greater welfare for America.”<sup>38</sup> Stemming from his own work in New York and

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<sup>35</sup> Morgan, “The Valley Region Physical Characteristics,” 21 May 1934, NBC Radio Address, 2: “Social and Economic Planning,” A.E. Morgan Speech Files, TVA Records, NARASE.

<sup>36</sup> Morgan, “Self-Sufficiency,” 17 July 1934, Knoxville, 2: “Social Plan,” A.E. Morgan Speech Files, TVA Records, NARASE.

<sup>37</sup> George Brown Tindall, *The Emergence of the New South, 1913-1945* (Baton Rouge: Louisiana State University Press, 1967), 448. Tindall argues that Morgan’s desire for social and physical engineering fit the early goals of TVA.

his initial support for George Norris's TVA bill, Roosevelt called for the unified development of the Valley in order to create that new economy. Like Morgan, he wanted to empower the community to better itself. Remembering an early meeting with Roosevelt, Arthur Morgan noted his concern for the southern people: "[He] spent most of our time together talking ... about the quality of life of the people of the Tennessee Valley."<sup>39</sup>

Visiting Tupelo, Mississippi, the first Valley town to receive power directly from TVA, the president marveled at the changed look on the people's faces: "I see not only hope, but I see determination and a knowledge that all is well with the country." He told the assembled audience that they were a "text" that would be read by people all over the country.<sup>40</sup> This fit with Roosevelt's notion of TVA as a "yardstick," a program that served as a new standard for power rates, agricultural production, industrial growth, and community development. Community action would create a new kind of economics in the South, and the Tennessee Valley would serve as a shining example of the possibility for real prosperity in the South. At a November 1934 press conference, Roosevelt made his views blatantly clear: "Now for the T.V.A. I can put it this way: Power is really a secondary matter. What we are doing there is taking a watershed with about three and a half million people in it, almost all of them rural, and we are trying to make a different type of citizen out of them, not what they would be under their present conditions."<sup>41</sup> Roosevelt had high expectations for the Tennessee Valley. He saw the

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<sup>38</sup> Roosevelt, "The Fourth 'Fireside Chat' – 'We Are on Our Way, and We Are Headed in the Right Direction,'" 22 October 1933, 420, in *The Public Papers and Addresses of Franklin D. Roosevelt, Vol. 2: The Year of Crisis, 1933* (New York: Random House, 1938).

<sup>39</sup> Arthur E. Morgan, *The Making of the TVA* (Buffalo, NY: Prometheus Books, 1974), 7.

<sup>40</sup> Roosevelt, "Extemporaneous Remarks at Tupelo, Miss.," 18 November 1934, 460-1, in *The Public Papers and Addresses of Franklin D. Roosevelt, Vol. 3: The Advance of Recovery and Reform, 1934* (New York: Random House, 1938).

federal agency as a tool, using careful planning, intelligent resource utilization, hydroelectric power, and community development to remake the southern collective consciousness. As historian Robert S. McElvaine noted, Roosevelt's TVA was "a model of the best that could be accomplished largely under the planning philosophy espoused by many New Dealers."<sup>42</sup>

In addition to creating a sense of communal cooperation, Roosevelt also hoped to boost the Valley economy by creating newly active consumers in the region. As he told the magazine *Looking Forward*, "This emergency exists among the farmers in this country today and I have not hesitated to say that the government owes a duty with respect to the restoration of their purchasing power."<sup>43</sup> Rural industrialization provided a source of wages for farmers, who might then use their fields and gardens for part-time cultivation and home consumption.<sup>44</sup> Like Morgan, Roosevelt envisioned a program for the Valley that combined planned agriculture and smaller, local industries in order to create a more viable economy.

Yet unlike Morgan, the president tied economic recovery to purchasing power. The chairman consistently spoke of his vision for the Valley in terms of communal cooperation. He hoped to encourage self-subsistence on farms and in towns all along the Tennessee River. Local

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<sup>41</sup> "Press Conference #160," 23 November 1934, 214, in *Roosevelt, Complete Presidential Press Conferences of Franklin D. Roosevelt, Volumes 3-4, 1934* (New York: Da Capo Press, 1972).

<sup>42</sup> Robert S. McElvaine, *The Great Depression: America, 1929-1941* (New York: Times Books, 1984), 155.

<sup>43</sup> Excerpts from speeches by Roosevelt included in letter from Philip S. Broughton to A.E. Morgan, 12 June 1934, 3: "Excerpts from Roosevelt's Speeches – By Topic," A.E. Morgan Papers, TVA Records, NARASE.

<sup>44</sup> Interview in *Government not Politics*, undated, 100-2, in *Ibid.* Roosevelt's desire to boost the purchasing power of the Tennessee Valley was most apparent in the creation of the Electric Home and Farm Authority (EHFA), formed under the TVA Board of Directors to increase the consumption and use of electrical appliances. Working with local businesses, the agency lowered the cost of refrigerators, electric washers, and other labor-saving devices and helped to set up long-term, low interest credit programs. The EHFA paid private appliance distributors for the products and consumers made payments directly to the government. Not only did the EHFA increase business for appliance retailers and manufacturers, but increased purchases also boosted local economies. See "TVA Electricity for All," [ca. December 1934], in George McJimsey, ed., *Documentary History of the Franklin D. Roosevelt Presidency, Vol. 28, Promulgation of the Tennessee Valley Authority* (LexisNexis, 2006), Document 129, 585-9. See also, Roosevelt, "Authorization of the Electric Home and Farm Authority, Executive Order No. 6514," 19 December 1933, 526-30, in Roosevelt, *Public Papers and Addresses, Vol. 2.*

crops fed farmers and workers alike, just as small-scale local industry would produce for regional demand. Roosevelt preferred to empower workers and farmers as consumers, as quintessentially “different” citizens. He stressed wages, which allowed southerners to purchase needed goods on the national market. For him, local farms and factories were primarily sources of jobs and wages, not the foundation of a communal economy. Even though both men proved idealistic in their goals for the depressed South, they did not necessarily agree on the nature of economic progress. In the heady days of TVA’s creation, this difference proved relatively minor – relief from unemployment and flooding came first. As the Authority began to implement its program in the Valley, however, Roosevelt proved more practical and more willing to embrace a different future for the region, particularly the future envisioned by Board member David E. Lilienthal. Lilienthal’s pragmatic program for TVA, based largely on the agency’s ability to provide cheap power for homes and businesses in the Valley, provided an alternative to Morgan’s idealism and soon came to dominate discussions of development in the region.

Lilienthal later recalled his disbelief at being offered a position on the TVA Board. He was younger than either Arthur Morgan or third Board member Harcourt A. Morgan, was not southern, and had no real engineering experience. Yet Roosevelt saw specific advantages in Lilienthal’s background. The Indiana lawyer had an intricate knowledge of public utilities laws and a familiarity with the workings of the electric business that proved useful in TVA’s development of a power program and its impending competition with private utilities. Lilienthal also had close relationships with other reformers, including Louis Brandeis, and shared their view that the government operation of some industries was crucial in the protection of public interest.<sup>45</sup> As William Leuchtenburg noted, Brandeisians like Lilienthal embraced regulation

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<sup>45</sup> Lilienthal, *The Journals of David E. Lilienthal, Vol. 1: The TVA Years, 1939-1945* (New York: Harper & Row, 1964), 32-3, 36.

that “checked monopoly and accentuated decentralization,” and TVA aimed its reforms directly at the utilities<sup>46</sup> Lilienthal began his tenure on the Board by working with officials in northeastern Mississippi to supply Tupelo with power. With the ink still drying on the TVA Act, Lilienthal promised Mississippians that power from Wilson Dam would bring industries to the state and supply cheap electricity to farmers and households across the Valley.<sup>47</sup> In July, overwhelmed by Arthur Morgan’s idealistic list of objectives, Lilienthal and Harcourt Morgan pressured the chairman to divide responsibilities. Arthur Morgan retained administrative leadership and oversight of the engineering and construction of hydroelectric dams, Harcourt Morgan took over agricultural programs, and Lilienthal focused on power and legal questions. Arthur Morgan resisted the division, fearing that the action hurt the ability of the federal agency to work for the overall development of the region, but Lilienthal found support from Roosevelt, and the division allowed the power director to focus more fully on his area of expertise.<sup>48</sup>

Lilienthal did not share Arthur Morgan’s idealism. He saw public power as both an opportunity to raise the standard of living in the South and a weapon to stop the abuses of private utilities in the region. Speaking to the Memphis Rotary Club, Lilienthal promised that electric power would improve “the quality and variety of commodities” and “break down the division between the country man and city man.” Lilienthal praised the idea of a power “yardstick” to demonstrate reasonable rates and expose the unreasonable prices charged by southern utilities. Successful power policy created “a balanced area of concentrated industrial activity, including

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<sup>46</sup> William E. Leuchtenburg, *Franklin D. Roosevelt and the New Deal, 1932-1940* (New York: Harper & Row, 1967), 164-5.

<sup>47</sup> “Authority Moves on Power,” *Florence Times*, 25 July 1933, 1.

<sup>48</sup> Marguerite Owen, *The Tennessee Valley Authority* (New York: Praeger Publishers, 1973), 46-7. Owen served as head of the Authority’s Washington office, giving her unprecedented access to internal documents. Her history of the TVA provides an interesting account of the agency’s policy-making process.

some cities of substantial size, good farms and reasonably favorable distribution possibilities.”<sup>49</sup> His was a different future from that envisioned by Arthur Morgan. Large cities with concentrated industries were an anathema to Morgan, who saw them as unbalanced, just like the cotton-based agriculture of the South. The two found room for agreement in the need to bring electricity to the farmer, but where the chairman consistently placed power second to resource management, Lilienthal made electricity the center of his plan for recovery and reform. Not only could power ease life on farms and in homes, but it might also provide important possibilities for commercial and industrial development. Lilienthal wanted to increase the South’s electric usage, decrease rates by a “drastic revision,” and work with “electric manufacturing and allied industries” to create new jobs.<sup>50</sup>

Lilienthal stressed industrial development early in his career, echoing Roosevelt’s call for increasing southern purchasing power and sharing the president’s consumerist program. Speaking on the future of the region, Lilienthal believed that “the Tennessee Valley region is to be the scene of an expansion of industry which in the course of the coming decade will change the economic life of the South.” He portrayed Valley residents as pioneers on the “frontier” of industrial life, and promised that the government would provide the large blocks of power needed for industrial use without the high rates private utilities charged for their “financial misdeeds.” Lilienthal also planned to use TVA’s engineers, technicians, and business experts to help advance the industrial program. Only large-scale industry gave the South the “abundance of goods” that might raise the standard of living and address the problems of unemployment, poverty, and general economic insecurity. Industry brought the added benefit of absorbing the

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<sup>49</sup> “Address of David E. Lilienthal, Director and General Counsel, Tennessee Valley Authority, Before the Rotary Club of Memphis, October 17, 1933,” 302-3, in McJimsey, ed., *Documentary History*, Vol. 28, Document 92, 300-8.

<sup>50</sup> Lilienthal to Col. Marvin H. McIntyre, 21 November 1933, in *Ibid.*, Doc. 97, 327-30.

“great pool of power” created by TVA dams.<sup>51</sup> In May 1934, Lilienthal began pushing for the creation of an Industrial Development Division working in conjunction with his Electric Division. He saw the Industrial Division as a logical extension of the agency’s power program, with its goal of self-sufficiency. The addition of Wheeler Dam, Norris Dam, and future hydroelectric projects would give TVA an expanded amount of available power. He argued that an industrial development program could “find a way to absorb the vast supply of power we are creating, on a favorable business basis and yet consistent with the Authority’s social objectives and policies.”<sup>52</sup> The planned Industrial Division would work with municipalities to expand their electrical capacity and bring in industries to use TVA power. It would also coordinate incoming businesses with the agency’s larger program for the Valley and adhere to New Deal industrial policies, with fair labor practices, decentralization goals, and an emphasis on increasing local purchasing power. Lilienthal proposed a clear strategy for accommodating TVA’s desire for resource management, calling for surveys and research into industries that would best utilize the materials and products of the region.<sup>53</sup>

The third Board member, Harcourt Morgan, was overshadowed by the dominant personalities of Arthur Morgan, Lilienthal, and Roosevelt. In the division of responsibilities, Harcourt Morgan took control of the agency’s agricultural policy, a natural role for the agronomist from the University of Tennessee. Harcourt Morgan’s early work focused on land use, particularly the prevention of further soil erosion and the operation of the nitrate plants at Muscle Shoals. He never sought public attention to the extent of his fellow Board members, and

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<sup>51</sup> Lilienthal, “The Future of Industry in the Tennessee Valley Region,” 21 April 1934, in *Congressional Record* (Senate), 73<sup>rd</sup> Cong., 2<sup>nd</sup> sess., 1934, 78, pt. 7: 7110-2.

<sup>52</sup> Lilienthal, “Project: Industrial Development Division,” 11 May 1934, 1, 218: “901.02 Industrial (surveys, statistics, studies, etc.),” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>53</sup> *Ibid.*, 2-7. See also Tindall, *Emergence of the New South*, 450.

he left fewer personal statements about any vision for the future. Instead, he immersed himself in his job. Harcourt Morgan began discussions with Alabama congressmen on the operation of the nitrate plants, and within the year, oversaw new construction at the site and began experimentally producing fertilizer. The intervening decade between the War Department's construction and TVA's acquisition of the plants had left them outdated. Harcourt Morgan added new furnaces and a new manufacturing plant and proposed a working relationship with state experiment stations and demonstration agents in which TVA would produce experimental fertilizer and use the existing farmer hierarchy to distribute and test the product.<sup>54</sup>

Harcourt Morgan also began TVA's soil conservation program, which he saw as an integral part of the agency's vision for the Valley. He argued that conscientious land management led to an increased food supply and a higher standard of living.<sup>55</sup> Again working with the Alabama Extension Service, TVA conducted a terracing school in Athens, Alabama. Funded and instructed by TVA experts, county agents and vocational teachers learned to effectively drain cropland and properly use vegetative cover to hold soil in the fields.<sup>56</sup> In his agricultural work, Morgan complemented the work of Arthur Morgan to protect southern resources. However, Harcourt Morgan gravitated to Lilienthal as the two worked on joint projects, and soon, Arthur Morgan became isolated and resentful.

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<sup>54</sup> "Construction at Nitrate Plant 2 to Start Soon," *Florence Times*, 18 October 1933, 1; Morgan to William B. Bankhead, 1 May 1934; and Morgan to Marguerite Owen, 1 May 1934, 93: "032.11 Bankhead, W.B.," Curtis-Morgan-Morgan Papers, TVA Records, NARASE. H.A. Morgan switched production at Muscle Shoals from nitrate-based fertilizer to phosphate-based fertilizer since the mineral was widely available in the Valley. Phosphate production also fit well with Morgan's larger attempt to introduce new, soil revitalizing crops to local farmers. See Phillips, *This Land, This Nation*, 101.

<sup>55</sup> Morgan, "Tennessee Valley Authority," 26 September 1934, in McJimsey, ed., *Documentary History*, Vol. 28, Doc. 119, 532-42.

<sup>56</sup> "Terracing School Held November 19, 1934, in Athens, Alabama, for the County Agents and Assistants to the County Agents of the Watershed Counties of Alabama" and "Soil Conservation," 98: "Miscellaneous – Soil Conservation," Removal Records, NARASE.

Arthur Morgan, David Lilienthal, and Franklin Roosevelt shared a common diagnosis of southern problems. Southerners needed to leave behind their overreliance on cotton cultivation in favor of a new economy based on community development. The three men also shared a broad support for the right of the government to take an active role in helping to create that new economy, using its “objective” position to direct a specific program of resource management that helped southerners use what they had to better their own lives. Beyond this broad consensus, however, the men differed on strategy. Arthur Morgan preferred to see the big picture. He connected dam construction, waterpower, agricultural improvement, and resource development in a program to balance revitalized southern farming practices with small, localized industries to offset farm incomes. Roosevelt shared this belief in a rural-urban balance, but his overwhelming reliance on consumerism and the importance of purchasing power led him to tend towards practicality. Like David Lilienthal, he believed that cheap, available electricity might make the difference in the region’s development. Both Lilienthal and Roosevelt knew current for homes and farms was important, but both thought the real benefit came from larger users, the industries that purchased large blocks of hydroelectric power from TVA dams and returned paychecks that helped southerners finally purchase the manufactured goods raised the Valley’s standard of living. Initially, the men found ample room for compromise, but as TVA faced an increasing challenge to define its policy, the differences between the directors blossomed into a power struggle that changed the nature of the agency.

As important as the Board’s vision of the future of the Valley came to be in focusing TVA’s policies, Valley residents had their own hopes and expectations for progress. Specifically, the people of the region wanted growth to bring jobs for the unemployed, power for domestic and industrial use, and cooperation with the government in directing development. In

Florence, the chamber of commerce celebrated the coming of the TVA after more than a decade of false starts. Leaders immediately began advertising cheap power, mineral deposits, local services, ample labor, and available land, introducing their community as “One of the South’s Most Beautiful Cities.” Within weeks, Florence began negotiations with industries looking to locate in the region and planned for a municipal power plant to distribute TVA power.<sup>57</sup> Despite warnings to be patient, potential workers flooded the Valley and realty companies again bought and sold lots based on the promise of future prosperity. Governor Benjamin M. Miller received telegrams begging for jobs, despite his lack of connection to the federal project. George F. Davis, who eventually found work as a machinist at the Muscle Shoals plants best enunciated the optimism: “TVA was young and everybody had high hopes of having a job.”<sup>58</sup>

Businessmen quickly moved to take advantage of the attention. G.E. Orley began planning a new, “modern” hotel, only to be told by TVA officials that the agency was not yet prepared to begin development in the Muscle Shoals region and that private improvements were being “discouraged.”<sup>59</sup> Even as TVA formulated policy, Florence prepared for its future. The *Times* encouraged the city to “come out of swaddling clothes and put on pants” to prepare for “commercial and industrial importance.” With a more active campaign for growth, city leaders could provide the “inducements” needed to bring in industry.<sup>60</sup> Here was the chance Florence had awaited since the excitement of the initial announcement for the nitrate plants. In the words

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<sup>57</sup> “Florence Ready to Welcome the Incoming Throngs,” *Florence Times*, 18 May 1933, 8; and “Florence Negotiates for Factories as Roosevelt’s Name Put on Shoals Bill,” *Florence Times*, 26 May 1933, 1.

<sup>58</sup> Mary Jane Lowe, interview with George F. Davis, 21 November 1990, 2: “George F. Davis,” Oral History Records, TVA Records, NARASE.

<sup>59</sup> For boom conditions at Muscle Shoals, see Frances Perkins to Roosevelt, 7 June 1933, in McJimsey, ed., *Documentary History*, Vol. 28, Document 74, 251. For telegrams to Governor Miller, see SG19942: 1, Benjamin M. Miller Administration Files, ADAH. G.E. Orley to Lister Hill, 21 September 1933, and L.G. Chase, TVA, to Orley, 28 August 1933, 34:66, Hill Papers, Hoole.

<sup>60</sup> “Time to Organize Up-and-Doing, Go-Getting Chamber of Commerce,” *Florence Times*, 9 December 1933, 1.

of incoming governor Frank Dixon, Florence and the rest of the Valley were preparing themselves for “the final realization of the dreams of the people” for “the reorganization of society itself.”<sup>61</sup>

Beginning in 1934, Valley residents received a first-hand look at the workings of TVA. The Board approved the construction of Dam 3, “Wheeler Dam,” originally planned by Alabama Power as part of the larger Wilson Dam project and initiated as a work relief measure to pump jobs and money into the Valley. The speed of the decision brought praise from many residents eager to see improvement on the river, but TVA had little time to formulate policies for land acquisition and population removal. Even as the agency began working with farmers and businessmen to improve the economy, social workers struggled to address the overwhelming poverty left by years of agricultural mismanagement. Thousands of Valley residents came into contact with TVA not just through agricultural demonstrations, power contracts, or jobs in new industries, but through land negotiations, property clearing, and eviction proceedings. By 1940, TVA’s relocation program became more organized, but the intervening years saw three reservoirs created in North Alabama, each with its own circumstances and specific problems. The agency’s interaction with the population of the Wheeler, Pickwick, and Guntersville Reservoirs highlights the competing views on development in the Valley. Forced to sacrifice their land, livelihood, and way of life, many Valley residents demanded developmental assistance from TVA; in doing so, they challenged the government agency to take a more active role in the economy of the region and helped shift its mission from balanced growth to industrial development.

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<sup>61</sup> Dixon, “The Utility Question,” [ca. 1934], 3: 39, Frank W. Dixon Administration Files, ADAH.

Finding a viable solution to the depressed agricultural economy was central to TVA's plans for the Tennessee River watershed. Economic depression continued to wreak havoc on the farmers who, years earlier, demanded assistance in the form of cheaper fertilizer from Muscle Shoals. TVA's research staff saw little hope for the tenants, renters, and laborers still toiling in corn and cotton fields: "The precipice becomes steeper and steeper so that ascent is increasingly difficult."<sup>62</sup> The researchers proposed a number of long-term programs to deal with the failing farm economy, including studies on the applicability of diversification, electrification, and mechanization. Farmers with land suited to pasturage were encouraged to grow livestock, while farmers with more fertile, flatter acreage might grow cash or food crops, depending on the needs of the community. The researchers asked farmers to purchase electricity to modernize their farms, and instructed them in the use of tractors, cotton pickers, and other mechanical tools that would increase efficiency. The report suggested that inefficient or unprofitable farmers should leave agriculture altogether for wage labor in regional factories, perhaps even producing the machinery that took their place.<sup>63</sup> Yet before such long range planning could occur, TVA had to address the rampant poverty and unemployment. Relief came before reform.

The agency ordered the construction of two dams immediately, hoping to put some farmers to work and spur the economic development that would help thousands of others struggling to survive. In October 1933, Roosevelt diverted \$7,000,000 from the funds allocated to TVA by Congress for the construction of Norris Dam to begin work on Wheeler Dam, 16 miles upriver from Wilson. The president's primary concern was unemployment, but the dam also extended a navigable channel to the city of Guntersville, Alabama, and controlled seasonal

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<sup>62</sup> Jasper B. Shannon, Social and Economic Research Division, "Tenancy in the Big Bend of the Tennessee River: A Summary," 1 June 1939, 43-6, 286: Loose, Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>63</sup> *Ibid.*, 76-86.

flooding around the city of Decatur.<sup>64</sup> TVA eventually purchased 100,000 acres of land above the dam in preparation for the flooding that created the Wheeler Reservoir, effectively uprooting 835 families, nearly equally divided by race. Of those displaced by the reservoir, only 100 made their living in areas other than farming, including fishing, small industries (sawmills, for example), and bootlegging. A number were unemployed.<sup>65</sup> Over 700 families lived on farms, though only 52 owned their land; the rest worked as tenants, sharecroppers, or wage laborers making less than one dollar per day.<sup>66</sup> Only 2% of inhabitants had finished high school and only two people interviewed had attended college; 80% of the children were below their average grade level, and 25% of the children in the region did not attend school regularly.<sup>67</sup> The prospects for moving people out of agriculture were grim. Only 33 people in the area had any kind of industrial experience. Living conditions were atrocious. Most lived in “acutely crowded” houses in “poor repair,” and the majority did not have enough furniture to meet the “minimum standard of comfort.” The average family carried water from 50 yards to their home, and a few drew water directly from the Tennessee for daily necessities.<sup>68</sup>

The agency understood from the outset that relocation would be a problem. The people had no livestock, no machinery, and no assets to help in securing a new home or farm. They were “localized,” as researchers noted, since most had lived in the area for years. The majority of those relocated chose to remain in the area, taxing an already overcrowded tenant population

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<sup>64</sup> “TVA Ordered to Build Wheeler Dam,” *Florence Times*, 14 October 1933, 1.

<sup>65</sup> Lawrence L. Durisch, Research Section, Social and Economic Division, “Preliminary and Confidential Report, Families of the Wheeler Reservoir Area,” 12 September 1935, 1-3, 1: untitled folder, Removal Records, TVA Records, NARASE.

<sup>66</sup> *Ibid.*, 3-5.

<sup>67</sup> *Ibid.*, 8.

<sup>68</sup> *Ibid.*, 10-12.

in a state that boasted the smallest average farm holding in the country. Even worse, as the New Deal farm program brought benefits to farm owners, tenants across the region were pushed off land to fill the strictures of crop reduction allocations.<sup>69</sup> Even as TVA sought to put men to work and to begin its resource management policy, its program demanded the dislocation of the very people it hoped to help.<sup>70</sup> Within the first year of its creation, the agency found itself stretching to accommodate families without jobs, without homes, and with no means of starting new lives. TVA kept a detailed record of its interaction with the people of the Valley, and the stories uncovered by case workers provide keen insight into the problems faced in bringing relief to the region.

For the area's more prominent residents, removal posed little financial problem. John Fuqua, a white bachelor, rented nearly 700 acres on Gilchrist Island, bringing in an estimated \$3000 per year and living in the "most prominent house on the island" while maintaining a "high" standard of living. A case worker noted that Fuqua "represents the old South: big, fat, hospitable, comfortable, thriving in the responsibility of his farm and his man serfs who work for \$.50 a day and board, and who evidently worship him"; his notoriety led to a common phrase among local tenants: "Mr. So-and-So is almost as good as Mr. Fuqua." TVA first contacted Fuqua in 1935, when he treated the case workers to fish, peas, tomatoes, cornbread, molasses, buttermilk, and a string of oaths and outbursts demanding the reason for the visit. Agency officials informed him they would be purchasing most of his land and his home and inquired into any removal plans. The farmer gave a common response: he hoped to rent acreage and continue

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<sup>69</sup> *Ibid.*, 19-20.

<sup>70</sup> In her history of New Conservatism, Sarah Phillips notes that this situation was a central problem for New Deal-era conservationists, including those in TVA. In the name of encouraging resource conservation across the South as a means of correcting the failing economy, federal planners inadvertently raised the value of private property and forced farmers and non-farmers to seek profits instead of sustainable agriculture. See Phillips, *This Land, This Nation*, 84.

farming, and he expected TVA to help him find a new place to live. Fuqua planned to finish harvesting his crops before taking possession of new rental property, but in January 1936, the weather forced action. The Tennessee River threatened “serious flood danger” due to heavy seasonal precipitation, and case workers told everyone below flood level, including Fuqua, to move as quickly as possible. Within the week, Fuqua removed to a new farm, though the new land could not compare to his former holdings and his house was in “poor repair.”<sup>71</sup>

Though maybe not as well off as Fuqua, some residents had enough resources to move on their own. Killen Littrell, a white sawmill operator, owned land on both sides of the taking line. Littrell had been in business for fifteen years, renting homes to five hired hands and employing a total of twelve men at his mill, three of whom lived in nearby board shacks. Littrell kept his mill running through the depression and earned enough to buy a five-room house, 100 acres, and a new mill.<sup>72</sup> He hoped to provide homes for his workers, exhibiting a desire shared by few owner-operators. TVA interviewed several of Littrell’s workers. His son, Leo, made \$360 in wages over the year and hoped to follow his father and continue working at the mill after relocation.<sup>73</sup> Fellow workers Louis Cox and Harrison Clint also hoped to move along with the business and rent houses for their families at the new location.<sup>74</sup> Follow-up interviews failed to note the fate of Littrell’s workers, though Killen moved his home to acreage he owned outside

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<sup>71</sup> Schedule 834, John Fuqua, 17 April 1935, 53: “White – male – separated – Wheeler”; and Family Case Record, John C. Fuqua, 24 October 1935, 64: “Fuqua, John, 834, Wheeler, Ala., Rt. 1,” Removal Records, TVA Records, NARASE.

<sup>72</sup> Schedule 476, Killen Littrell, [1935], 57: “Wheeler 970s, Libscomb-Lyle (17),” Removal Records, TVA Records, NARASE.

<sup>73</sup> Schedule 477, Leo Littrell, [1935], in *Ibid.*

<sup>74</sup> Schedule 478, Harrison Clint, [1935], 56: “Wheeler 970s, Cauthers-Cowley, various counties (5)”; and Schedule 480, Louis Cox, [1935], 56: “Wheeler 970s, Cox-Duncan, various counties (6),” Removal Records, TVA Records, NARASE.

TVA's taking line. His son took a job with TVA and both reported to be "satisfactorily relocated" by the end of 1935.<sup>75</sup>

Other owners were not as concerned for their tenants and workers. J.G. Finley lived in the town of Decatur but owned farmland on an island in the Tennessee. The case worker assigned to the island characterized the land as "flat, fertile, and cultivable ... the best looking farm I have seen down here" and described irrigation ditches and thousands of dollars of farming equipment. Finley did not make a similar investment in his workers. He refused to allow TVA workers onto his island, but his resident manager spoke to case workers. Charlie Webb, Finley's white manager, made \$1.50 per day, more than double the "poverty wage" of \$.50-\$.70 paid to Finley's laborers. Charly Hodges, a black renter, worked as a farm laborer for Finley and, despite the loss of an arm in a cotton gin accident, proved "very efficient with a plow." Finley provided a home for Hodges, his mother, and a brother, but the house stood in "bad" condition.<sup>76</sup>

Hodges's situation was typical of life on Finley Island. Conditions on the island were "squalid" and wages were too low to provide any hope for successful relocation. When Finley sold the island to TVA, workers would be "turned out" and rendered "helpless – even by comparison with sharecroppers."<sup>77</sup> In December 1935, Hodges remained on the land, harvesting Finley's hay and corn and tending livestock; the owner refused to cooperate with TVA until the year's crops were processed. Finley gave vague promises of assistance, but in May, case workers found Hodges and his brother renting a home in Decatur, working day labor when jobs

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<sup>75</sup> Family Case Record, Schedule 476, Littrell, [1935], 66: "Littrell, Killen L., 476, Rogersville, Rt. 1," Removal Records, TVA Records, NARASE.

<sup>76</sup> Schedule 368, Charly Hodges, 25 March 1935, 53: "Negro – male – separated – Wheeler," Removal Records, TVA Records, NARASE.

<sup>77</sup> Schedule 367, Charlie Webb, [1935], 59: "Wheeler 970s, Snowden-Toney, various counties (28)," Removal Records, TVA Records, NARASE.

became available.<sup>78</sup> Finley gave more assistance to his manager, agreeing to allow Webb to use his boat to move his family's possessions from the island into a house Finley owned in Decatur. Webb hoped to continue as a farm manager after removal, but October found him working as a day laborer for John Sewell. The case worker considered Webb's relocation "satisfactory," since he found work closer to a school and other community resources, but Webb disagreed, complaining of the loss of livelihood after his removal from Finley Island.<sup>79</sup>

Finley's relationship with his workers and with TVA illustrates one of the major flaws in the agency's relocation policy. The TVA Act specifically gave the Board the power of eminent domain to ease land acquisition in preparation for dam construction. While not legally required, the TVA also made a determined effort to work with the families that moved from the reservoir area. Case workers met with each family and noted their living conditions, available resources, job history and future prospects, and plans for relocation. The agency appointed social workers familiar with the people of the Valley and their way of life, hoping to inspire "complete confidence" among affected families.<sup>80</sup> However, the TVA Act did not give the agency the ability to offer needy families direct aid. Instead, legislation called for cooperation with national and state relief agencies. As a later removal manual noted, the agency could only "advise and cooperate." Workers had to "interpret the needs of reservoir families to interested agencies and ... interpret outside agencies to the reservoir group."<sup>81</sup> More specifically, TVA could list farms

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<sup>78</sup> Schedule 368, Hodges, 15 November 1935, 65: "Hodges, Charlie, 368, Decatur, Ala., Rt. 1," Removal Records, TVA Records, NARASE.

<sup>79</sup> Schedule 367, Webb, [1935-6], 70: "Webb, Charlie, 367, Decatur, Alabama," Removal Records, TVA Records, NARASE.

<sup>80</sup> Reservoir Family Removal Section, "Activities of the Reservoir Family Removal Section, Wheeler Reservoir Area," undated, 2-3, 71: "Wheeler-Final Report (First Draft) – Report of Family Removal Activities," Removal Records, TVA Records, NARASE.

for sale, but families were forced to look elsewhere for the loans or financial advice on purchasing them. Workers referred cases to state boards, farmers' organizations, and other New Deal programs, creating a network of bureaucratic aid that limited the ability of TVA to fully assist the farmers and workers displaced by its projects. The Authority could make Finley sell his property to the government, but it had little or no recourse when he refused to care for those the sale affected.

Many families found removal a stressful process, especially those without the means or ability to find a farm or home comparable to the one taken by the government. Some families were homeless even before relocation and TVA's workers found themselves in the unwanted position of evicting squatters and "transients" from land near the river. Bob and Sara Jane Lokey, a white couple with three children, lived in two tents on a small plot of woodland north of Decatur. One tent served as a bedroom and the other as a kitchen, dining room, and workshop in which Bob made plaster toys, earning just under \$15 per month. The family had no plans for removal and no resources to begin life elsewhere. After Christmas, the Lokeys simply packed their tents and moved to Huntsville.<sup>82</sup>

Buddy Cole's situation was even worse. Cole, his wife, and two children squatted in a two-room house on the estate of a local farmer. Raising poultry and fishing, Cole earned less than \$100 per year. The family presented a real challenge for relocation. Cole was a skilled carpenter, but an accident and the resulting infection led to the amputation of both legs. He survived by selling fish caught out of the Tennessee River. Cole constructed a metal slide from his home to a boat on the shore, using his hands to pull himself down the slide and into the

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<sup>81</sup> Reservoir Family Removal Division, "Manual," [ca. 1936], 2, 1: "Norris Correspondence (manual, ca. 1936)," Removal Records, TVA Records, NARASE.

<sup>82</sup> Family Case Record, Schedule (Pickup), Lokey, [1935], 66: "Lokey, Bob, Transient Pickup, Decatur, Ala.," Removal Records, TVA Records, NARASE.

vessel. His son rode a bicycle into Huntsville to sell the catch, but epileptic fits prevented him from working in local industry. Cole's wife, Ruth, had previously worked in textile mills around Huntsville with brothers and sisters, but as the depression closed mills in the city, Ruth and her family found themselves unemployed.<sup>83</sup> As the Cole family looked towards the future, their options were extremely limited. Cole needed a plot of land adjacent to the river to continue fishing, but his wife would almost certainly have to find work in local industry for the family to make ends meet.

In early 1936, TVA condemned the estate on which the Coles squatted. The heirs could not agree on providing for the Coles, who had verbal permission to live on the land from the estate's deceased owner. By March, the family's case worker had little hope for an adequate settlement for the family.<sup>84</sup> The worker suggested contacting state aid agencies to acquire artificial legs for Cole and assistance for his family, and TVA began canvassing local landowners in search of a small plot of land. Workers genuinely wanted to help Cole and his family but their fate lay outside the realm of TVA's influence. The estate's heirs controlled the disposition of funds from TVA's purchase, and the Coles had no legal right to the land or even the house they occupied. Her hands tied, the case worker informed Cole: "I realize that this seems very hard and unjust but there is nothing TVA can do about it." The agency took possession of the land and according to guidelines for condemnation proceedings, put Cole's small home up for auction. The situation appeared particularly grim.

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<sup>83</sup> Schedule 642, R.F. "Buddy" Cole, [1935], 56: "Wheeler 970s, Cauthers-Cowley, various counties (5)," Removal Records, TVA Records, NARASE.

<sup>84</sup> TVA hired case workers to interact with those living on the land needed for reservoir and dam construction. The workers interviewed residents and assessed both their living conditions and the resources they could draw on for relocation. Case workers then recommended how TVA, within its sphere of authority, might best facilitate resettlement. The workers became the face of TVA for many in the Tennessee Valley, and as such, received their share of complaints. The individual reports, drawn up by case workers for each family interviewed, provide interesting insight into the lives of Valley residents, as well as the difficulties encountered in population relocation.

Cole pleaded with TVA leaders for assistance. The agency helped Cole buy back his house, contacting local farmers to ensure that no one topped Cole's bid of two dollars for the structure, but the family had no means of moving the house, even after taking outright possession. Cole began dismantling his home board by board and ordered additional materials to build a houseboat, which he hoped to moor off of public land somewhere along the river. TVA asked local hardware stores to donate materials for his boat, but his physical handicaps made construction difficult. By November, over a year since the Coles were first contacted, the family had almost finished their "substantial and durable" new home, and had begun moving from the tent that had provided shelter since the demolition of their original house. Cole floated his boat to Huntsville, where he moored off Alabama Bridge Corporation property near the Whitesburg Bridge. Cole kept fishing, but his wife was unable to find employment due to ongoing textile strikes in the city. The process left Cole bitter. Once completely cooperative with TVA, Cole had become "defiant and resentful" and he threatened to illegally remove timber from TVA land as retribution for his losses.<sup>85</sup>

Cole's case is an extreme example of the effects of dislocation on the local population, but it serves as an important indicator of the limitations the government agency faced in providing aid and assistance. Like the Coles, many Valley farmers lived on and worked small farms under oral contracts with their landlords. When TVA purchased or condemned land, their negotiations with landowners usually included resident tenants, but payment for tenants' homes or land was largely left to the owners' discretion. Some owners worked to help their laborers and tenants find new homes and jobs, but many chose to leave them to their own devices. TVA searched for state assistance for displaced tenants, and as in the Coles' case, the agency worked

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<sup>85</sup> Family Case Record, Cole, Schedule 642, 25 November 1935, 63: "Cole, R.F. (Buddy), 642, Huntsville, Ala. Rt. 4," Removal Records, TVA Records, NARASE.

to aid families without the resources to help themselves. In the end, however, the government faced strict limitations. The Authority could work to get Cole possession of his home, but could not give him financial assistance to obtain the materials to build again or purchase land. Instead, the agency had to ask local citizens and state agencies to provide for his family's needs.

Given the haste with which TVA implemented its plans for the Wheeler Reservoir, the agency faced relatively little difficulty in convincing families to leave. Those who moved, however, faced a new life in a transformed environment. Former tenant farmers worked for wages on farms and in factories. Uprooted families moved into town and off land that had been theirs for generations. When the Tennessee River surged onto farms and fields in late 1936, it covered more than land. The river brought a symbolic close to the predominance of agriculture in the Valley, pointing to a new commercial and industrial future that TVA and other groups would struggle to embrace in the coming years. In February, TVA made its final report on removal activities at Wheeler. The agency began by noting that, in its attempts to readjust widespread tenancy of the region, it actually worsened the problem by "taking thousands of acres of fertile land out of production ... causing 835 families to relocate in an already over-populated area." The report also noted that local relief agencies were "not equipped to handle this problem immediately," and an attempt to work with the government's Resettlement Administration led to a year of "watchful waiting" with no real result.<sup>86</sup>

The Alabama Extension Service did help some, finding farms for owners who received money from TVA, but owners made up only 1/16 of the total population. By the time the service published its report, 823 of the 835 families had moved from their land "without recourse to legal eviction"; however, a study of conditions in the Wheeler reservoir after removal painted a

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<sup>86</sup> Reservoir Property Management Division, "Population Readjustment, Wheeler Area," 1 February 1937, 2-3, 1: untitled folder, Removal Records, TVA Records, NARASE.

less successful picture. Only 39% of families moved to locations with better access to community resources, and only 37% moved to better housing conditions. The majority found themselves in similar conditions as before, though a third now lived in “unsatisfactory housing.”<sup>87</sup> The flooding of the fertile river bottomlands marked an important transition in the area’s agricultural future. Only 8% of families moved to land that had better soil, while nearly 70% were on land “generally poor and less satisfactory than land on which [the family] formerly lived.”<sup>88</sup> TVA realized that the process of relocating families demonstrated a real need for continued development in the region. Months after the Authority closed the Wheeler field office and began operating the newly finished dam, the report concluded that further work towards readjusting the population to their new physical and economic environment was sorely needed.<sup>89</sup>

TVA faced similar problems at the future sites of the Pickwick and Guntersville Reservoirs, though in each case, the characteristics of the flooded land differed from that of Wheeler. Neither Pickwick nor Guntersville had as large a tenant population as Wheeler. Of the 600 farm families affected by flooding at Pickwick, 70% did not own the land they farmed, compared to over 90% of the families at Wheeler. At Pickwick, the major concern was the flooding of two towns, Waterloo and Riverton, both of which partially lay on land that would be covered by the reservoir.<sup>90</sup> Yet despite the different situations at Pickwick and Wheeler, the Authority came to a similar conclusion: TVA could not simply move families and hope that their new circumstances would allow for a better economic foundation for themselves and their

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<sup>87</sup> *Ibid.*, 12.

<sup>88</sup> *Ibid.*, 12-3.

<sup>89</sup> *Ibid.*, 2.

<sup>90</sup> *Technical Report No. 3, The Pickwick Landing Project: A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Pickwick Landing Project* (Knoxville: TVA, 1941), 335: “3-400, The Pickwick Landing Project,” Office of Engineering, Design and Construction Files (EDC Files), TVA Records, NARASE.

community. Readjustment meant a longer, more involved process of working with individuals and groups to provide instruction in new farming methods, encouraging business relocation to affected areas, and training to assist Valley residents to adapt to industrial employment, whether on TVA projects or in private companies. As at Wheeler, TVA took the best farmland at Pickwick, leaving opportunities scarcer than before. Available land and homes were nearly impossible to find, and those that had land or buildings to sell demanded high premiums or even cash considerations. Many families at Pickwick, as at Wheeler, simply moved onto the narrow portions of land adjoining the reservoir, waiting for TVA to force them off of what had become government property.

C.H. Long's case was typical of Pickwick farmers. The farmer cultivated hay and corn on rented bottomland along the Tennessee. When TVA informed Long of the coming reservoir, he protested, claiming he would be unable to remain solvent without the productive farm. TVA tried to convince Long and his wife to work with the agency's agricultural scientists to terrace other acreage in nearby hills, but Long remained "dogmatically opposed" to the idea, an attitude his case worker described as characteristic of the "hill people" in the community. Like the "hundreds of other families" affected by the reservoir, Long faced a choice of learning a new method of farming or relocating elsewhere. After a failed attempt to rent TVA land and get a job on a clearance crew, Long and his wife left the community in an attempt to find better land in another part of the Valley, a search made much more difficult by TVA's continued program of land acquisition in the area's most fertile fields.<sup>91</sup>

Pickwick provides a telling example of other "dislocations" associated with TVA's activities in the Valley. Mancil Milligan left a job as a school teacher to help build the dam at

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<sup>91</sup> Removal Information Form, Long, C.H., 27 February 1937, 76: "Hardin Co., Farm Owners, Relocate – Fields thru Welch," Removal Records, TVA Records, NARASE.

Pickwick. In 1935, he began working as a Public Safety Officer at the “Negro Camp,” the housing facilities built for black construction workers. Milligan noticed a change in his lifestyle almost immediately. The Authority tore down old shotgun houses and built new sturdy homes for workers and their families. Milligan used his newfound income to buy an electric iron, a refrigerator, a fan, and a radio.<sup>92</sup> His life illustrated the benefits of a government agency providing both employment and cheap electricity. Yet as the *de facto* police force and fire department, Milligan’s fellow Public Safety officers witnessed the seamy side ventures that accompanied rising income. Pickwick Village was full of single men with money to burn, and as Milligan noted, a community of “beer joints and gambling joints and wild women” soon sprang up nearby. Called “Slab Town,” the collection of shacks attracted construction and clearance crews leaving their shifts. Milligan remembered that the agency “resented Slab Town being there ... and did everything they could to suppress it to have a decent place for their employees and the community as a whole.”<sup>93</sup>

TVA tried to block the town’s influence, dismissing workers whose “performance suffered because of Slab Town’s influence,” but the town persisted. Unable to buy up property in the town, which was tied up in leases and overpriced, the Authority asked Milligan and his fellow officers to reign in disturbances.<sup>94</sup> The Public Safety Force was overmatched. Despite attempts to close down bootleggers and gambling halls, beer joint owners plied their craft out in the open – one female owner confidently strolled around her room naked with the lights on and

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<sup>92</sup> Mary Jane Lowe, interview with Mancil Milligan, 7 July 1988, 1-3, 6: “Milligan, Mancil,” Oral History Records, TVA Records, NARASE.

<sup>93</sup> *Ibid.*, 11.

<sup>94</sup> Steve Killingsworth, “Regional Planning on a Local Scale: The Brief Life of Pickwick Village,” *West Tennessee Historical Society Papers* 51 (1997): 55. Killingsworth investigated life at both Pickwick Village and Slab Town, concluding optimistically that TVA “accomplished what its designers envisioned” and carried benefits that “extended far beyond the confines of the project area.” See Killingsworth, “Regional Planning,” 60.

shades open.<sup>95</sup> A fellow officer recommended Milligan buy a “big club” or a gun since the job “was just about as rough as could be.” For its part, the Authority tried to create a different culture. In the end, Slab Town did little to affect TVA’s legacy of economic progress, but its existence does illustrate one of the negative consequences of growth. The Authority hoped that in building dams and employing locals, it would create the foundation for a new type of community in the Valley. Yet even as it created villages of workers, it could not dictate their every action. If TVA was to bring progress, it needed to plan for every eventuality.

Unlike Wheeler or Pickwick, the Guntersville relocation program included a comparatively large town. With a population of nearly 3,000, Guntersville nestled in a bend in the Tennessee River and like Waterloo, relied on the river for daily life. When TVA began planning a dam for the city, it realized that the changes would have a major impact on the community. Flooding would surround the city, and rising water would cover the water supply by almost 30 feet, necessitating a new water filtration plant and sewage system. The reservoir would also cover the town’s railroad connection and the associated industries lining the tracks, including a cotton mill and warehouse, a lumber mill, a basket factory, oil and gasoline storage facilities, and electric and water substations.<sup>96</sup> As with Pickwick and Wheeler, the dam took the area’s best farmland out of circulation. However, at Guntersville, the city’s economy also stood to lose much of the woodland fueling the timber industries, and by covering the town’s major highway connections, the dam would disrupt commercial activities. Planners were optimistic that Guntersville could eventually recover, even prosper with cheap electricity and protection from flooding, but they admitted that the transition would be onerous: “[I]t should be recognized

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<sup>95</sup> Lowe, interview with Mancil Milligan, 7 July 1988, 8, 10.

<sup>96</sup> Research Division, Social and Economic Division, TVA, “The Guntersville Area and the Proposed Coles Bend Dam, Preliminary and Confidential Report,” 23 November 1935, 26, 2: “Studies and Reports – Guntersville Area [2],” Removal Records, TVA Records, NARASE.

that the loss of trading territory and the probable loss of its wood-working industries will necessitate a period of readjustment for Guntersville which will be doubly difficult since it will follow the boom period of dam construction.”<sup>97</sup>

In the end, removal activities at Guntersville affected more families than Wheeler and Pickwick (1,182 compared to 842 and 506, resp.) and required a larger outlay of funds (\$36,000 compared to \$29,000 and \$34,000).<sup>98</sup> Like its predecessors in Alabama’s Tennessee Valley, the Guntersville project drastically changed the regional economy. As families left homes, farmland, timber jobs, and retail stores, they looked to start again while remaining in familiar surroundings. The dam at Guntersville was the last major TVA construction project in Alabama for thirty years. While the agency’s experience at Wheeler and Pickwick prepared it for dealing with financial assistance and land condemnation, it still struggled to define the economic future of the region.

At Guntersville, the agency worked with local resettlement projects, including Skyline Farms, a planned rural community in the Appalachian foothills southwest of the Valley. Spots were limited, so TVA forced potential residents to apply for available positions, weeding out those without the requisite farming experience or with questionable social and family characteristics. Clarence Carter, his wife Gussie, three children, and his brother-in-law Robert Lowery were given positions at Skyline. Carter’s case worker praised his experience as a sharecropper, his clean home and land, and his “normal” and healthy family. By October, Carter and his family had settled at Skyline, building a new home and planning for next year’s crops.<sup>99</sup>

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<sup>97</sup> *Ibid.*, 27.

<sup>98</sup> Reservoir Property Management Department, “Annual Report, Population Readjustment, 1938-39,” [1939], 2, 8: “Population Readjustment, Annual Reports, 1935-6 thru 1943-4,” Removal Records, TVA Records, NARASE.

<sup>99</sup> Relocation Information, Clarence Carter, 10 June 1938, 91: “Carter, Clarence thru Caswell, Dewey – Guntersville,” Removal Records, TVA Records, NARASE.

Spots at Skyline were only for families with a proven record of self-reliance. John Whitner, a white renter on relief from several federal and state agencies, was not recommended for a resettlement farm. Whitner lived on a houseboat in a disordered and unclean condition with little furniture and no real assets. In preparation for removal, TVA first contacted Whitner's relatives, but none had the resources to help the family leave land located well under the taking line for the reservoir. Next, the agency contacted state welfare workers, who acquired a quarter-acre lot up for lease from one local farmer and a building and barn from the First National Bank. Whitner disassembled his houseboat and put in a monetary claim to TVA for repayment. His case worker gave no opinion on the legitimacy of the claim, but recommended TVA pay it so that the family might have enough money to better their living conditions: "there is an opportunity to do an excellent piece of case work."<sup>100</sup> For families uprooted from their former way of living, claim payments were the only direct assistance of any kind from the TVA.

Removal activities at Guntersville ended in 1939 on the eve of TVA's mobilization for the national defense build-up that preceded World War II, and the results spoke volumes for the agency's work in North Alabama. In its final report, the Population Readjustment Division called its work a "long-time program" that required the participation of state and federal relief agencies to help the affected communities meet their social and economic problems. Authority officials needed to continue planning and studying to help discover potential challenges; as the report succinctly concluded, "An awakened and enlightened community becomes cognizant of all its social and economic ills."<sup>101</sup> Of the 1,200 families removed from the Guntersville

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<sup>100</sup> Relocation Information, John Whitner, 13 May 1938, 94: "Whitehead, Ane thru Whitten, Phil," Removal Records, TVA Records, NARASE.

<sup>101</sup> Population Readjustment Division, Reservoir Property Management Department, "Population Readjustment: Guntersville Area," June 1940, 2-3, 2: "Studies and Reports – Guntersville Area [1]," Removal Records, TVA Records, NARASE.

Reservoir area, 67% left farmland and many looked to Alabama's Agricultural Extension Service for help learning to cultivate new land, finding new houses and farms, and making other adjustments. Extension workers met individually with families and assisted in the moving process. Of 667 tenant families, only 45 became owners after moving. The vast majority became tenants on new farms or left agriculture altogether.<sup>102</sup>

The immediate results were not what TVA hoped to accomplish. Instead of helping revitalize agriculture in the Valley, removal activities exacerbated the tenancy problem. The best land lay under newly created reservoirs while farmers struggled to adapt to less cultivable lands. Combined with acreage reduction programs like those implemented by the Agricultural Adjustment Act, TVA's work made land even scarcer while forcing thousands of families into the land market. Agency planners hoped that fertilizer production from the Muscle Shoals plants and education programs would make the remaining land more productive (thus supporting more farmers per acre), but they also realized that for many, readjustment meant trading the mule and plow for a job in local factories. The improvements to the Tennessee River at Guntersville may have adversely affected some of the local industries in the short run, but improved transportation, cheap electricity, increased agricultural productivity, and recreation opportunities would bring permanent and "far-reaching" progress for industrial development at Guntersville, as well as TVA's other reservoir projects.<sup>103</sup> In 1939, just as TVA was emerging from its court battle with private utilities and a bitter Board fight between directors, its predictions for the Valley seemed overly optimistic. However, as defense mobilization brought expanded economic opportunities, promises of industrial development became a distinct reality.

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<sup>102</sup> *Ibid.*, 8-9, 15.

<sup>103</sup> *Ibid.*, 16-7.

Publicly, the Tennessee Valley Authority bragged about the success of its removal policies. At Wheeler, Pickwick, and Guntersville, the agency only condemned 13% of the land needed for its reservoir because of a refusal to sell.<sup>104</sup> Yet statistics fail to illustrate the ways in which some Valley residents attempted to resist relocation. Some felt TVA had undervalued their land. At Guntersville, citizens formed the Tennessee Valley Land Owners Protective Association and contacted Representative John Sparkman to protest unfair prices that prevented them from finding a new home and farm that compared to the one purchased by the agency. The landowners decided that a court fight would be too expensive, and looked to Sparkman to plead their case with the Authority.<sup>105</sup> After similar letters from other Guntersville residents, Sparkman admitted that some of the prices paid to landowners seemed “unfair,” but that the agency’s outlined policy for compensation was legally binding and there was little Congress could do to help.<sup>106</sup>

Others accused TVA of dishonest practices. W.B. Rudder of Section, Alabama, complained to Sparkman that the Authority condemned the land of his orphaned brother’s children, forcing them to accept a low price and pay the cost of the transaction. He noted the importance of land, especially to children without another source of income: “Their property is a life time’s worth of a little family, is their just and right.”<sup>107</sup> J.W. Knight created the Tennessee Valley Landowners Mutual Aid Agency to assist families in the Wheeler area who felt cheated.

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<sup>104</sup> *Technical Report No. 2, The Wheeler Project: A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Wheeler Project* (Knoxville: TVA, 1940), 311: “3-400A The Wheeler Project”; *The Pickwick Project*, in Box 3135: “3-400, The Pickwick Landing Project”; and *The Guntersville Project: A Comprehensive Report on the Planning, Design, Construction, and Initial Operations of the Guntersville Project* (Knoxville: TVA, 1941), 387: “6-400 Guntersville Project,” EDC Files, TVA Records, NARASE.

<sup>105</sup> Gus May, Assistant Secretary, Tennessee Valley Land Owners Protective Association, to Sparkman, 18 January 1938, 35, “TVA: Misc., 1938 (Jan.-Mar.),” John J. Sparkman Papers (Sparkman House Papers), Hoole.

<sup>106</sup> Sparkman to R.C. Moore, 26 May 1937, *Ibid.*

<sup>107</sup> Rudder to Sparkman, 6 December 1937, 35: “Tennessee Valley Authority: Miscellaneous, 1937 (Jul.-Dec.),” Sparkman House Papers, Hoole.

He wrote to Hill, asking him to lead the Military Affairs Committee in an investigation of land purchase practices, and included three personal statements by black residents who sold land to the agency. Fannie Smith sold 20 acres for TVA's price after being told that if she refused the initial offer, "they would cover the land up with water and it would not be of any value to [her]." Anna Kirby was told that she would not receive more than \$834 for 60 acres of land in Lawrence County, and to try to get a better price would be "useless." Spot Foster gave a similar account, detailing an ultimatum from his caseworker that forced him to sell for much less than his land was worth.<sup>108</sup>

The experiences of Smith, Kirby, and Foster were repeated across the Valley. The cases taken to court represented only those with the financial resources and willpower to enter into a lengthy legal battle with the federal government. Many others begrudgingly accepted TVA's offer for their homes and farms with the belief that no real alternative existed. Historians have criticized removal policies for failing to follow the dispossessed landowners more fully after relocating. Instead of working to help locals adapt to a modern economy, TVA simply helped farmers find new real estate. As Michael McDonald and John Muldowny noted in their study of relocation activities at Norris, "socioeconomic planning for rural communities does not appear to have been [TVA's] primary goal. When work on the dam was begun, there had been little or no thought given to translating the modernization process into realistic terms insofar as the removed populations were concerned."<sup>109</sup> Left to seize their own opportunities, the dislocated placed their hope in the economic revitalization that would hopefully accompany the agency's program.

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<sup>108</sup> Knight to Hill, 10 April 1935, 34: 69, Hill Papers, Hoole.

<sup>109</sup> Michael J. McDonald and John Muldowny, *TVA and the Dispossessed: The Resettlement of Population in the Norris Dam Area* (Knoxville: The University of Tennessee Press, 1982), 266-7.

Forced off of productive farmland, in some cases held by families for generations, Valley residents trusted that their sacrifice would be repaid with prosperity.

As Valley residents left homes and farms surrounding the Tennessee River, the TVA began working to implement the improvements that would bring a new economy to the region. Much of TVA's early work took an indirect approach to economic improvement. Following Arthur Morgan's calls for balanced growth of agriculture and industry, the agency relied on a program of instruction and training in both farm and factory work. Phosphate production at Muscle Shoals provided both fertilizer for local farms and work for locals. TVA employed hundreds of workers at the plants and thousands more in dam construction and reservoir clearance. The jobs provided emergency relief for Valley residents, and though temporary, gave a boost to the local economy and on-the-job training for future work in the private sector. In its employment practices, TVA demonstrated a willingness to challenge, but not overturn, the prevailing social and cultural practices in the South, giving its economic program a larger ideological goal that fit with the chairman's vision for the Valley. Throughout the 1930s, TVA implemented that vision across the region, yet even as the agency worked to rewrite the Valley's socioeconomic future, locals made their own plans. Many happily followed along with TVA's program, participating in training programs, planting new crops, and testing TVA's fertilizer in their fields. Others pushed TVA to take a more active role in building the regional economy, calling for more jobs and assistance in civic growth and development. As the agency began gearing for national defense at the end of the 1930s, internal struggles and external pressures drove the TVA to compromise Morgan's original mandate for balanced growth.

After families moved from TVA land, the agency brought in crews of clearance workers and construction laborers drawn from the local population. At Wheeler, some 3,600 men worked to clear timber off of soon-to-be-flooded land. TVA segregated workers by race, with several black clearance crews employing 700-800 locals. Clearance work required few skills, allowing the agency to hire many men who could not find jobs on construction crews or in the operation of the dams and powerhouses. For other Valley residents, work on dam projects provided a steady job with wages almost as high as in those found in private manufacturing. At Wheeler, TVA employed men on four shifts, supervised by government engineers and technicians. The agency received a thousand applications per day for work in its construction program, even after TVA specifically limited nonprofessional jobs to Valley residents. To help with the overload, the U.S. Civil Service Commission held examinations in Valley centers, requiring potential workers to take reading and mechanical aptitude assessments. The commission even provided a “nonlanguage” test for applicants with little or no formal education. The examinations weeded out those unwilling or unable to train for construction work (more than half of initial applicants never took the examination, a fear of failure that admittedly helped TVA screen job seekers).<sup>110</sup>

Wheeler proved instructive in a number of ways. The civil service examinations resulted in a “superior corps of workers” that allowed TVA to promote foremen and other construction supervisors “from the ranks,” many of whom transferred to other dam projects across the Valley. The benefits were not relegated to government projects. As Mancil Morgan, a Public Safety Officer at Pickwick, noted, “If you were a carpenter, you had a job. If he [sic] was a farmer, he could sell everything that he grew to the people. If he was a merchant, his business was good. If he was an automobile mechanic, he had a good job. So everybody got a piece of the pie, and we

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<sup>110</sup> *The Wheeler Project*, 311: “3-400A The Wheeler Project,” EDC Files, TVA Records, NARASE.

built the dam.”<sup>111</sup> Construction at Wheeler also allowed TVA to flesh out its labor-management relations policy. In 1935, the agency put in place a specific channel for worker-supervisor dialogue that helped to create a fairly harmonious attitude among employees. As time progressed, TVA created training courses for dam work and recreational programs that acted to “increase the efficiency of men on the job, to allow employees to prepare for other jobs inside and outside the Authority, to provide for the general educational, recreational, and social needs of employees and their families.”<sup>112</sup>

By the time TVA began work on Pickwick and Guntersville, many of these improved techniques were put into practice. Clearance work remained largely unchanged, but TVA worked closely with construction workers to provide accommodations that would embody the future of the Valley economy. At Pickwick, TVA built separate black and white villages for workers with dorms, community buildings, schools for employees’ children, and parks for recreation.<sup>113</sup> With a smaller black population and better local facilities, Guntersville had no separate black village, but TVA did build both black and white dorms for workers, separate community buildings, and unlike both Wheeler and Pickwick, a women’s dorm for female workers. Guntersville’s construction crews came from “Workmen’s Examinations” given within a 75-mile radius of TVA’s nearby projects. TVA offered courses in math, blueprint reading, electricity, concrete, pipe-fitting, tooling, and welding, all skills needed in dam construction and maintenance.<sup>114</sup>

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<sup>111</sup> Mary Jane Lowe, interview with Mancil Milligan, 7 July 1998, 3, 6: “Milligan, Mancil,” Oral History Records, TVA Records, NARASE.

<sup>112</sup> *Ibid.*

<sup>113</sup> *The Pickwick Landing Project*, 335: “3-400A The Pickwick Landing Project,” EDC Files, TVA Records, NARASE. See also Killingsworth, “Regional Planning on a Local Scale.”

<sup>114</sup> *The Guntersville Project*, 387: “6-400 Guntersville Project,” EDC Files, TVA Records, NARASE.

TVA's attitude toward dam workers exemplifies its early position on economic training and development. Faced with thousands of tenants and other farmers forced off of their farms, the agency implemented a program to employ Valley residents and train them to oversee the very construction program that had displaced them. TVA drew technicians and engineers largely from government service, with experience in the Army Corps of Engineers and other engineering and design firms. Some came from the private sector, including a surprising number from ALCOA, already developing a close relationship with the government in the 1930s.<sup>115</sup> However, these educated technicians were supplemented by Alabamians, Georgians, and Tennesseans no longer able to make a living growing cotton and corn. By employing some of the region's surplus of farm labor, the TVA eased demands on dwindling cultivable acreage while providing immediate work relief and training for future skilled and semi-skilled labor.

Such training lay at the center of Arthur Morgan's vision for the Valley's economic future. The chairman praised the "initiative and self-directive" nature of Valley residents – the very traits necessary for successful employment on TVA jobs and work in the private sector.<sup>116</sup> Morgan began implementing his larger training program at Muscle Shoals in early 1935. With construction underway at Wheeler, the program was partially attributed to self-interest – better trained workers would build a better dam. Yet Morgan noted a much larger goal for trained men and women: "To train employees to become artisans in the possible industrial development of this area, and to take a definite place in an improved agricultural-industrial society."<sup>117</sup> TVA

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<sup>115</sup> Gordon Clapp to General Manager John B. Blandford, Jr., "Analysis of Previous Experience of Major Personnel," 3 December 1936, 114; "210 Employee Relationship Policy, 1938," Lilienthal Correspondence, NARASE.

<sup>116</sup> Morgan, "Attitude of TVA Employees," 29 September 1934, Knoxville, 2: "Personnel," Morgan Speech Files, NARASE.

<sup>117</sup> [Morgan], "Tennessee Valley Training Program, Muscle Shoals Area: A Tentative and Unofficial Statement of Work, Aims, and Objectives," 21 March 1935, 2, 9; "Training at Muscle Shoals," A.E. Morgan Papers, NARASE.

worked with the city of Sheffield to develop an elementary and high school education program at Wilson Dam and cooperated with the State Teacher's College at Florence (later the University of North Alabama) to create an adult education program open to TVA employees and local citizens. At Pickwick, TVA's Agricultural Division held agricultural training program in conjunction with Agricultural Extension Service.<sup>118</sup> F.W. Reeves, an independent consultant hired to examine the agency's overall training program, gave the data for February 1936, showing the overwhelming popularity of training among the local citizenry. Over 1,600 people enrolled in 63 occupational training activities, including mathematics, blueprint drafting, and personnel administration. Almost 10,000 participated in planned recreation, 7,000 attended informal discussion groups, 603 officially enrolled in adult education classes, and over 7,000 attended 80 informational film screenings. TVA created farm shops to rent agricultural and mechanical tools to local residents, and mobile book-borrowing units that traveled to clearance sites, loaning books to workers across the Valley's rural communities. Library facilities distributed nearly 19,000 books to 5,000 borrowers.<sup>119</sup> Besides training in dam construction camps and rural communities, TVA held classes in larger cities such as Knoxville, Chattanooga, and Florence, working in conjunction with local universities to allow TVA's administrative staff to "satisfy their needs for increased capacities."<sup>120</sup>

In addition to tackling the economic woes of Valley communities, TVA's planners hoped to address the region's racial and gender inequalities, though in ways that proved woefully inadequate. TVA offered a unique opportunity for southern women, who enjoyed few

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<sup>118</sup> F.W. Reeves, Independent Consultant, to John B. Blandford, 27 March 1936, 222: "920.001 Training and Educational Programs in General," Curtis-Morgan-Morgan Papers, NARASE.

<sup>119</sup> *Ibid.*

<sup>120</sup> Training Division, "Summary Statement of Program, Training Division, Personnel Department," [1938], 6-7, 159: "321-71-1-4 (2) Training Branch: Duties, Activities, Policy," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

opportunities outside farm homes and textile mills. The agency employed only men for dam construction and clearance work, but hired many women to fill lower level administrative positions, and TVA included community women in training programs that fit their perceived potential as secretaries and stenographers. Perhaps the best opportunity for women workers in the agency came in the field of social work. Some of TVA's most successful case workers in North Alabama were women, including Principal Social Case Worker Martha Branscombe, who helped lead removal efforts in North Alabama. Yet she proved the exception – Branscombe's associates were mostly male, while the office staff consisted of a cadre of female typists.<sup>121</sup> By 1939, the Board had begun studying its position towards its female workforce. In particular, David Lilienthal asked for an internal investigation into opportunities for women in TVA's executive and administrative positions and questioned the existence of a gendered wage ceiling. His conclusion was pessimistic, suggesting that "TVA has made substantially no contribution toward any pioneering that might be done," but the investigation itself presaged a more intensive effort to include women in the agency's program.<sup>122</sup>

Arthur Morgan specifically promised to raise the standard of living in black communities in the Wheeler and Wilson Dam regions. TVA taught new trades to black men and new home-making skills to black women, enlarging their "social outlook" and providing a base for a "new approach to the race question" and "a new economic era for the South."<sup>123</sup> Morgan's attitude towards black workers exhibits both the promises and limitations the agency brought to white

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<sup>121</sup> Reservoir Family Removal Division, "Manual," [ca. 1936], 3, 1: "Norris Correspondence (manual, ca. 1936)," Removal Records, TVA Records, NARASE.

<sup>122</sup> Forrest Allen, Asst. to Lilienthal, to Gordon Clapp, Director of Personnel Division, 23 March 1939, 222: "920.001 Training and Educational Programs in General," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>123</sup> [Morgan], "Tennessee Valley Training Program, Muscle Shoals Area: A Tentative and Unofficial Statement of Work, Aims, and Objectives," 21 March 1935, 1-2 [3-4], 9: "Training at Muscle Shoals," A.E. Morgan Papers, TVA Records, NARASE.

and black residents of the Valley. Morgan truly believed that through training, he could redirect the economic efforts of former farmers. Yet he and other workers and planners brought their own prejudices to the training program. He assumed black Valley residents lived in “degenerate” conditions that needed to be rectified, despite the overwhelming evidence that poverty did not follow the color line. Morgan did attempt to bring relief to residents of all races, but in adopting the prejudices of southern society, he ensured that African Americans would continue to lag far behind their white neighbors.

One of the more telling criticisms of TVA’s early programs came from A.W. Davis, the Chairman of the Colbert County Negro Citizens League. Davis wrote to local Probate Judge C.E. Carmichael to protest TVA’s lack of “practical understanding of the people in the Valley,” particularly the African American community. Davis hoped that the agency would create a position, “Director of Negro Planning,” staffed by a black citizen who would better understand the needs of their communities. He suggested Norman T. Thomas, a janitor in TVA’s Fertilizer Department at Muscle Shoals who received an education from Talladega College and had seven years of teaching experience in local schools. He ended optimistically: “We are of the opinion that the Authority should know that we, as a race, still believe in it; and that if we can get started right we shall be able to regain some of the lost time of earlier years.” TVA remained circumspect. Carmichael and John Sparkman forwarded the correspondence to Director of Personnel (and future Chairman of the Board) Gordon R. Clapp after approving of Davis’s suggestion and praising Thomas’s character. Clapp promised to keep Thomas in mind “when the question is brought up,” but the discussion ended there.<sup>124</sup>

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<sup>124</sup> Davis and Prince E. Eggleston, Secretary, to Carmichael, 22 August 1938; and Clapp to Sparkman, 3 October 1938, 35: “TVA Misc., 1938 (Apr.-Dec.),” Sparkman House Papers, Hoole.

For his part, Thomas continued to push for greater African American representation in TVA's policy-making process, particularly its creation of segregated parks in the Valley. In September 1939, Thomas wrote Sparkman of his fears that space and budgetary constraints would prevent states and cities from creating parks for black residents on par with those for whites. He asked the senator to contact the Department of the Interior in order to get a black representative of the National Park Service to locate in the Tennessee Valley to oversee the creation and maintenance of recreational spaces for blacks. In return, Thomas promised to "make patriotic talks to my people all over the area." The NPS Director responded that while the government, and the NPS and TVA in particular, were sympathetic to the problem, no black representative would be needed since the states and TVA were studying the problem on their own.<sup>125</sup> In passing on Thomas's offer, the government again refused to give Valley blacks a voice in the development of their community.

From the outset, TVA had attempted to include the Valley's black residents in its relief program. Black tenant farmers and farm owners in the reservoir areas received assistance from relief agencies contacted by TVA and the agency created segregated clearance crews to employ African Americans. The official employment policy specifically banned discrimination on the basis of race or gender, and in order to ensure inclusion, TVA developed a plan to employ black workers on the same basis as their proportion of the local population. Granted, TVA made an attempt to include the Valley's African American population in its program, but proportional representation did little to address the social and economic needs of the black community.

This became painfully clear as Clapp tried to address a list of grievances given by Charles E. Houston in a brief on TVA's race relations. Houston charged that TVA failed to

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<sup>125</sup> Thomas to Sparkman, 15 September 1939; and Amo B. Cammerer, Director of the National Park Service, to Sparkman, 3 October 1939, 35: "TVA Misc., 1939 (Jul.-Nov.), Sparkman House Papers, Hoole.

develop an integrated policy on race relations, and instead considered blacks as “a labor commodity rather than as citizens.” He specifically pointed to the agency’s failure to combat the racism that depressed black participation, including social pressure and rumors at the Norris Dam site and abuse and mistreatment at Chickamauga Dam, which kept blacks from joining unions. Instead of helping the black community, TVA had introduced more severe patterns of segregation and closed opportunities for blacks in employment, recreation, and job training. In response, Clapp emphasized the agency’s policy of nondiscrimination and proportional employment. He admitted that TVA had no official policy specifically designed to address race relations and stated that the Board “has not felt that it was given a special assignment to reconstruct the racial relationship of the population of the South.” Clapp addressed Houston’s charges of misconduct at Norris and Chickamauga, stating that TVA had to bring in black workers from nearby cities at Norris to meet the agency’s own employment requirements. When that cost proved overwhelming, the Authority compensated by hiring more than proportion dictated at Chickamauga, causing tensions with the local population. Clapp clearly believed that while the agency had a responsibility to include the black population in the Valley’s economic improvement program, it would not attempt to change the social order. In providing specific industrial training for black workers, segregated parks on government land, and in separating jobs by race, TVA was preparing for the “more obvious needs” of the community.<sup>126</sup> Clapp and the Board based policy on their own interpretation of the needs of Valley blacks without considering the expectations and desires of the African American community.<sup>127</sup>

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<sup>126</sup> Clapp, “Board Management Item, #8, Review of the Negro Problems,” 15 May 1939, in Box 68: “210.2221 Negroes or Colored,” Records of the Chairman and the Members of the Board of Directors, 1939-1957, James P. Pope and Raymond R. Paty (Pope-Paty Papers), TVA Records, NARASE.

<sup>127</sup> Nancy L. Grant’s *TVA and Black Americans: Planning for the Status Quo* (Philadelphia: Temple University Press, 1990) provides an engaging critique of the Authority’s policy towards the Valley’s African American population, illustrating the ways in which proportional representation preserved the “unique characteristics” of

TVA failed to challenge social inequality in the South, but for Authority leaders, particularly Arthur Morgan, the agency had a larger obligation to reverse the economic inequality that kept the South from joining the rest of the nation. Morgan believed that training would improve the long-term economic prosperity of the Valley, but local leaders had more pressing concerns. The Authority drastically reduced electric rates for both domestic and industrial customers, and city leaders hoped that the “yardstick” rates would help attract industries already drawn by the region’s physical and human resources. During the debate over Muscle Shoals, Florence’s efforts at industrial growth illustrated both the interconnected nature of electric generation and industrial growth and the belief among certain sections of the Valley that economic prosperity would come only with jobs. The Alabama Industrial Board admitted as much in 1934, stating that the location of industry in the state would employ laborers either looking for manufacturing jobs or failing to profit from their farms. No one suggested a wholesale exodus from the fields, even after the TVA took some of the most productive land along the river bottoms. Instead, the Industrial Board and many city leaders called for more intelligent farming practices that would make communities more self-sustaining and give the region the ability to produce the food and agricultural materials needed for the incoming factories.<sup>128</sup> By bringing industries to the Valley, city leaders hoped to provide jobs and paychecks, but they also hoped to grow the market for farm products, allowing those determined to farm to have a better chance at economic success.

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southern racial segregation by keeping blacks in temporary, low-paying jobs (xxvii, 23-4). See also William Warren Rogers, Robert David Ward, Leah Rawls Atkins, and Wayne Flynt, *Alabama: The History of a Deep South State* (Tuscaloosa: The University of Alabama Press, 1994), 486.

<sup>128</sup> Alabama Industrial Board, “Relations of New Industries to Existing Agriculture in Alabama,” 19 February 1934, 218: “901.03, Social thru 1934,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

Of all Valley cities, Decatur seemed to have the greatest promise for growth under TVA's larger resource management plans. The city lay within the reach of power from Wilson Dam, and with the completion of Wheeler Dam, the area enjoyed a surplus of power that would easily accommodate a number of factories. The Depression hit the Decatur region hard, affecting both the surrounding agricultural counties of Limestone and Lawrence and the city itself in Morgan County. As Decatur attorney John Caddell remembered, the Valley was "broke, sick, [and] discouraged." The town boasted only one industry, the Louisville & Nashville Railroad shop, and nearly every resident relied on the company's paychecks, whether as direct income or in the form of customers and patrons. The shop closed just before TVA entered the Valley, creating a real economic crisis. From June to December 1933, Caddell only earned \$76 from his practice and almost left the area.<sup>129</sup> Located on the southern bank of the Tennessee in the center of the Valley, Decatur was an ideal transportation hub for regional products. The surrounding agricultural community provided a large potential market for consumer goods and a source for foodstuff and raw materials. Just as important, the city boasted an active leadership, willing to grasp any opportunity to revitalize the economy. TVA brought such an opportunity.

As one resident noted, TVA "put the spark back in the growth of Decatur," literally.<sup>130</sup> Decatur immediately began using low power rates to sell itself to industrial prospects. In the mid-1930s, city leaders worked with TVA officials and the state government to attract a Chicago aluminum plant. Governor Bibb Graves formed the Alabama Industrial Authority, a state bureau authorized to assist private companies expanding on government loans, to help the plant relocate

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<sup>129</sup> Shirley D. McCrary, interview with John A. Caddell, 27 February 1989, Tape AC-54, Side A, Colonial Dames Oral History Collection (Colonial Dames), ADAH.

<sup>130</sup> Shirey McCrary, interview with Rutledge Thomas, 23 February 1989, SPR 521, Tape AC-54, Side A, Colonial Dames, ADAH.

in the Valley.<sup>131</sup> In 1935, thanks in part to Decatur's chamber of commerce, the Ingalls Iron Works purchased eight acres of riverfront property to build boats and barges in expectation of increased navigation on the river. The plant praised the city's efforts to create a "successfully planned community of activity and progress."<sup>132</sup> The driving force behind Decatur's growth was the editor of the *Decatur Daily*, Barrett Shelton. As his city pushed for industrial prospects, Shelton cultivated relationships with John Sparkman, Lister Hill, and David Lilienthal. In March 1937, he asked Sparkman and Lilienthal to help bring in 500-1,000 jobs to the city to help boost consumer sales. In his view, the city was "ready to go and with no place to go."<sup>133</sup> Shelton praised TVA's work in bringing a factory to Muscle Shoals, but noted that the plant would have little impact on Decatur's economy.

Lilienthal sent economic advisors to Decatur to work with the editor and other business leaders. In 1937, the city was in the midst of negotiations over its municipal power plant, but TVA representatives promised that as soon as Decatur received power from the agency, industries would follow. They also suggested technical studies to evaluate the city's available resources, particularly those on local farms. For Shelton, Decatur's economic success was a reflection of TVA's progress: "So long as Decatur remains in her present position, one of unsoundness and one of comparative poverty, she will be no advertisement for the effectiveness of TVA. A down-at-the-heel town cannot prove good advertising." The losses caused by the depression did more than take jobs out of the area – economic trouble led to a decline in "civic consciousness" that private utilities, particularly Alabama Power, proved unable to address. The

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<sup>131</sup> "Aluminum Plant for Decatur Looms with Signing of Act," *Decatur Daily*, 11 July 1935, 1, 2.

<sup>132</sup> "Ingalls Iron Works to Put Permanent Plant in Decatur," *Decatur Daily*, 12 November 1935, 1; and "Varied Industry," *Decatur Daily*, 5 December 1935, 4.

<sup>133</sup> Shelton to Sparkman, 2 March 1937, 35: "TVA: Misc., 1937," Sparkman House Papers, NARASE.

city was “groping” for new leadership and TVA’s assistance was the boost needed to put Decatur back on track.<sup>134</sup> Shelton and his fellow boosters’ aggressive development program could not locate every industry, but working in concert with city officials, congressmen, and TVA, he changed Decatur’s economy. In addition to the Ingalls Shipbuilding plant, the city attracted investments from the Gulf Refining Company and Standard Oil, both of which built terminals on the river to supply fuel to the growing Valley.<sup>135</sup> At the end of the 1930s, Decatur began to realize the kind of industrial development that became widespread in the following decade. The city set an important precedent for Lilienthal and TVA’s program, and as the nation geared for war, the agency played a more active role in bringing manufacturers to the Valley.

In 1938, President Roosevelt’s National Emergency Council released its “Report on the Economic Conditions of the South,” famously referring to the region as the nation’s “number one economic problem.” The group portrayed a region replete with resources but marked by mismanagement, poor health, and low income. Southern communities and the TVA quickly responded to the report, defending the region against its detractors. TVA’s reply highlighted the agency’s work to address each economic problem described by the presidential committee. Farmers replenished their soil with TVA fertilizer, and reforestation, wildlife protection, resource studies, and careful planning kept southern resources from being wasted. Dams on the Tennessee prevented destructive flooding and provided hydroelectric power that allowed for the electrification of homes, farms, and businesses at low rates. TVA created thousands of jobs on its construction projects and clearance crews, and its self-described policy of non-discrimination

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<sup>134</sup> Shelton to Lilienthal, 15 September 1937; J. Haden Aldridge, Principal Transportation Economist, to Lilienthal, 23 September 1937; and Shelton to Lilienthal, 23 September 1937, 58: “095, Decatur, Alabama, thru 1937,” Lilienthal Correspondence Files, TVA Records, NARASE.

<sup>135</sup> “Second Development,” *Decatur Daily*, 10 April 1939, 4.

set a standard for treatment of southern blacks for other regional businesses. Workers fought the spread of malaria and educated communities on proper nutrition. TVA cared for southern families through education programs at dams, and the agency's "enlightened" labor policy claimed not to discriminate based on gender or race and refused to employ children under the age of sixteen. The response praised TVA's farm program, which educated farmers about diversified farming and produced cheaper fertilizer, making soil more productive and farming more efficient. Finally, the agency worked to develop new industries for the region, employ those out of work, and provide new sources of income that would help to give southerners a larger share of the national economy.<sup>136</sup>

TVA's response to the report was the ultimate expression of its early policy for the Valley's economy. Faced with a sobering analysis of the South, the agency stressed its management of the region's abundant resources. Over the past five years, TVA had encouraged intelligent land use practices to revitalize southern agriculture while building a foundation for smaller industries that used available resources to employ surplus farm labor and provided goods for newly active southern consumers. Following the program put in place by Arthur Morgan, TVA sought to create balanced communities that relied on agricultural products and industrial wages to create interdependency and self-sufficiency instead of overreliance on one-crop agriculture or rampant industrialization. Yet even as TVA stressed balance, the agency had begun to move away from its earlier policies. In 1938, the differences between Arthur Morgan and David Lilienthal exploded and the fight between TVA and private utilities began to swing in the government's favor. External forces drove the agency to focus largely on electricity, even as Arthur Morgan became isolated and eventually exiled from the administration of the Authority.

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<sup>136</sup> "Summary Statement, TVA Cognizance of the Economic Conditions of the South and Its Contribution Toward Their Improvement," [1938], 111: "901.04 thru 1948," Paty-Pope Papers, TVA Records, NARASE.

Valley leaders also responded to the charge that the South was an economic problem for the nation. The *Decatur Daily* proudly boasted that *Fortune* magazine had named the South the “nation’s number 1 opportunity,” with data offsetting the National Emergency Council’s report. Shelton promised that the region was on the verge of development that would dwarf all previous growth. In fact, the coming prosperity would cause “painful readjustments in certain Northern industries” as factories decided to relocate where cheap power, transportation, and available labor provided a better business climate. The paper promised that the tendency of some southern leaders to “grovel in ashes strewn by the Emergency Council” did not represent the majority of southerners.<sup>137</sup> The paper hoped its optimism would spur citizens to better themselves. Yes, the South was the poorest section of the country, but in pointing out the problem, Roosevelt’s council provided an opportunity to bring in better schools, more industry, and diversified farming. TVA could certainly help in that improvement, specifically by building a river terminal and airport at Decatur to improve transportation facilities. The area needed the “substantial payrolls that come from industry,” and that industry would only come with improvements to Valley resources.<sup>138</sup> Public pressure grew in the Valley, calling for jobs in the industries coming to use cheap hydroelectric power. Instead of balance, TVA tipped the scales of the southern economy towards industry. Like Authority officials, Valley leaders acknowledged their economic inequality with the rest of the nation but resented the implication that the region had become an economic “problem.” They demanded industry and its associated payrolls and jobs to offset agricultural stagnation. By the late 1930s, TVA was coming to appreciate the importance of industry in the revitalization of the region, and a series of internal and external crises would completely reorient the Authority’s program in the Valley.

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<sup>137</sup> “Number 1 Opportunity,” *Decatur Daily*, 31 October 1938, 4.

<sup>138</sup> “Definite Objectives,” *Decatur Daily*, 11 September 1939, 4.

## CHAPTER 4

“The Re-establishment of Human Beings on Their Own Feet”: The Tennessee Valley Authority, 1938-1940

Here in the South we have men and institutions that can grow and develop to meet the very great, almost overwhelming, opportunities and problems of sound industrial development.<sup>1</sup>

In 1938, Alabama’s Herman Clarence Nixon published *Forty Acres and Steel Mules* while working on rural rehabilitation programs for the Federal Emergency Relief Administration. Nixon’s work, a classic example of New Deal agrarian liberalism, synthesized the philosopher’s vision for the South. He worried that southern businessmen wanted industrialization so badly that they might agree to the “exploitation” of the region’s resources. Nixon warned, “The town welcome sign should carry a speed limit, a limit on the production of cheap goods with cheap labor.”<sup>2</sup> TVA provided Nixon with a perfect example of the best path to economic development. He called the agency the “strongest card in the New Deal,” and he wrote that it represented “extra-regional capital and a measure of extra-regional control, but from Washington, not Wall Street.”<sup>3</sup> Like Chairman Arthur E. Morgan, Nixon believed that in an ideal South, agriculture and industry would work together, providing a balance between farmers and laborers, rural life

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<sup>1</sup> Title Quote from David E. Lilienthal, *The Journals of David E. Lilienthal, Volume 1: The TVA Years, 1939-1945* (New York: Harper and Row, 1964), 212 (9 September 1940); Opening quote from David E. Lilienthal, “New Industries for the New South,” 20 March 1941, in *Congressional Record* (Appendix), 77<sup>th</sup> Cong., 1<sup>st</sup> sess., 1941, 87, pt. 11:A1281.

<sup>2</sup> Herman Clarence Nixon, *Forty Acres and Steel Mules* (Chapel Hill: University of North Carolina Press, 1938), 73, 77.

<sup>3</sup> *Ibid.*, 81.

and urban life. He suggested, “The small town with a diversified economic life achieves something of a social balance and tends to escape the concentration of power in too few private hands.”<sup>4</sup>

*Forty Acres and Steel Mules* was well received across the South. The Agrarians, never fans of industrial growth in the region, called Nixon’s ideas “more realistic than other New Dealers,” and C. Vann Woodward praised the work as “a splendid impetus to a new realism.”<sup>5</sup> Nixon understood that the South was changing. In Mississippi, state officials had begun actively recruiting industry with a program seeking to “Balance Agriculture with Industry.”<sup>6</sup> In the Tennessee Valley, city leaders turned to cheap electricity as a way to bring factory jobs and local investment. Unlike the Agrarians, who lamented this change, Nixon sought to provide parameters by which the South might receive the benefits of industry, particularly jobs and paychecks, without the negative consequences of unchecked urbanization and rampant boosterism. Unfortunately for TVA, the publication of *Forty Acres* came too late. By 1938, the agency had begun to shift away from Nixon’s balanced communities towards a new strategy focusing on industry. Led by David E. Lilienthal and encouraged by Valley leaders, TVA entered the war years prepared to build a new economy along the Tennessee River. As “realistically” as Nixon described the changing South, neither he nor Arthur Morgan fully predicted the way in which the “strongest card in the New Deal” would usher the region into the Sunbelt economy.

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<sup>4</sup> *Ibid.*, 46-7.

<sup>5</sup> Sarah Newman Shouse, *Hillbilly Realist: Herman Clarence Nixon of Possum Trot* (Tuscaloosa: The University of Alabama Press, 1986), 71-2.

<sup>6</sup> See Cobb, *Selling of the South*; and Connie L. Lester, “Balancing Agriculture with Industry: Capital, Labor, and the Public Good in Mississippi’s Home-Grown New Deal,” *Journal of Mississippi History* 70 (Fall 2008): 235-63.

During Arthur Morgan's tenure as chairman of the TVA Board of Directors, the agency faced a number of criticisms. However, thanks to the economic turmoil of the Great Depression, few southerners challenged the core policies of TVA. The agency created thousands of jobs on construction projects, land clearance work, and at the Muscle Shoals nitrate plants. Electricity flowed to rural areas for the first time, making life easier for farmers and their families. New businesses arose and others relocated, taking advantage of cheap power costs (and cheaper labor). Franklin D. Roosevelt and Arthur Morgan added their considerable reputations to the Authority's efforts, calling for a reconstruction of the southern economy. The president stumped for TVA, translating his national popularity into localized support. Morgan enacted his idealistic views in practical programs for the Valley by initiating job training, planning housing and recreation for TVA workers, and tentatively testing southern mores in calling for unionization and proportional racial inclusion. To be sure, not everyone rejoiced in the Authority's entrance into the Southeast. Some private utilities feared competition with a public power provider whose low prices seemed unaffected by the market. Other Valley residents questioned Morgan's vision, particularly those adversely affected by the Authority's land acquisition policies. Forced off land and out of the agricultural economy, many southerners looked to TVA to provide a new way of life and refused to wait patiently for the agricultural-industrial Eden promised by the chairman.

From the outset, Chairman Arthur Morgan and Board member David E. Lilienthal could not agree on the actual work of the Authority in the Valley. Morgan continued to stress an idealistic future of communal self-sufficiency in which farmers and workers alike might leave behind the shackles of one-crop agriculture for localized factories and diversified farms which would meet all the needs of the community. Lilienthal scoffed at Morgan's communalism. For

the Power Division director, electricity held the key to regional prosperity. Cheap government-produced and government-distributed power allowed struggling farmers to find new jobs, earn enough to raise the standard of living, and participate in a national consumer economy. At first, the disagreements between Lilienthal and Morgan remained in the boardroom as both men scrambled to introduce the Authority to the Valley. The chairman was consumed with the needs of land clearance and dam construction, while Lilienthal immediately began negotiations with private utilities, angry at the prospect of losing thousands of customers. Yet the mutual distrust and dislike between Morgan and Lilienthal seethed throughout the 1930s. When the fight broke into the open in 1938, the resulting upheaval reshaped the entire Authority.

Even as TVA's leadership refused to agree on the agency's core philosophy, private utilities planned a last-ditch effort to halt the Authority's advance into the Valley. Alabama Power led the charge, trying to prevent further losses in North Alabama. The Authority may have been a recent creation, but the private utility had long fought to develop the Tennessee River, as evidenced by its attempts to lease the Muscle Shoals facilities. As the Authority began to build hydroelectric dams, Alabama Power turned to legal action to prevent the loss of thousands of customers. During the 1930s, Alabama Power and its parent company, Commonwealth and Southern, challenged the government's ability to produce, transmit, and distribute electricity to consumers. David Lilienthal became the public face of the "Power Fight," blasting the utilities and promising cheap power to residents and businesses alike. Just as the Board fight gave Lilienthal control of TVA's program for the Valley, his victory over the utilities ensured that across the Valley, TVA electricity was associated with economic progress. Thus, on the eve of World War II, David Lilienthal's TVA was positioned to take the Valley economy in an entirely new direction.

Barely a month after Roosevelt signed TVA into existence, two of its directors found their relationship would “require a good deal of working out,” as David Lilienthal later noted.<sup>7</sup> Problems began when the Board divided responsibilities – both David E. Lilienthal and Arthur E. Morgan defended their own interests. Morgan, who opposed the division of tasks, was eager to boost construction as a way to provide relief for the thousands of unemployed in the Valley, but he refused to limit his oversight to the dams. He believed that as chairman, he had a responsibility to oversee all aspects of the Authority’s program. His fellow directors felt differently. Harcourt Morgan took charge of agricultural development and Lilienthal assumed control of the TVA’s power plans, and neither wanted to include Chairman Morgan in decisions concerning their areas of authority. Lilienthal quickly promoted his views on power and development, and he saw Arthur Morgan’s communalism as impractical and impossible to implement.<sup>8</sup> Arthur Morgan appreciated TVA for its position as an arm of the federal government and for the unlimited scope of its aims. His plans for balanced industrial and agricultural growth meant direct involvement in the daily activities of local farmers and business owners. Morgan’s TVA would tell farmers what to plant, since unrestricted personal choice would continue the damaging cotton monoculture, and it would direct specific industries to prearranged locations, choosing rural rather than urban centers in other areas of the country. Lilienthal, on the other hand, viewed TVA as a kind of private industry operating under the guise of the federal government. He wanted to improve the southern economy, but he placed his trust

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<sup>7</sup> Lilienthal, *The Journals of David E. Lilienthal, Volume 1: The TVA Years, 1939-1945* (New York: Harper and Row, 1964), 37, 39 (22 June 1933). As with any entry from Lilienthal’s published journal, this statement must be considered critically. While the director’s later hostility towards Morgan undoubtedly colored his remembrance of their earlier interactions, the journal is valuable as proof that, at least for Lilienthal, the disagreements that erupted in the late 1930s came from earlier differences in opinion.

<sup>8</sup> *Ibid.*, 42-3.

in electricity to provide the needed boost. His main concern was the factories that would demand large blocks of power. Ironically, his program of development largely resembled that of Alabama Power, encouraging industrial growth as a means to fund other, less profitable projects, though Lilienthal refused to recognize any grounds for cooperation with private utilities. This fundamental difference between Morgan and Lilienthal led to widely divergent plans for the agency's future.

In 1936, David Lilienthal's seat on the Board came up for reappointment. With Valley towns eagerly scrambling for TVA electricity, most assumed he would return with little trouble. Chairman Morgan, however, saw an opportunity to remove a growing threat. He told Secretary of the Interior Harold Ickes that "Lilienthal has hampered him at all stages ... He betrays confidences to the newspapers, carries on negotiations for power contracts without contacting [Morgan]."<sup>9</sup> Lilienthal's public persona became a particular worry for the chairman, who later charged that while he concerned himself with the technicalities of everyday work, Lilienthal made friends in Washington and in the press to ensure his ascendancy.<sup>10</sup> Morgan informed Roosevelt that he would resign if Lilienthal returned to the Board, but the president did not share his views. Roosevelt appreciated Lilienthal's understanding of the electric business, particularly amidst the ongoing fight with the private utilities. He reappointed Lilienthal and promised that, if Morgan remained hostile, then "he must be ready to take responsibility for delaying and perhaps disrupting not only TVA but the whole future."<sup>11</sup> The president understood the importance of coming to an agreement over the future of the program for the Valley, and as the

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<sup>9</sup> Harold Ickes, *The Secret Diary of Harold Ickes: The First Thousand Days, 1933-1936* (New York: Simon and Schuster, 1953), 566 (30 April 1936).

<sup>10</sup> Morgan, *Making of the TVA*, 26-7.

<sup>11</sup> Lilienthal, *Journals, Vol. 1*, 62, (12 May 1936).

struggle with the private utilities continued, he came to appreciate Lilienthal's willingness to confront Alabama Power. As Morgan continued to resist, Roosevelt found himself drawing closer to Lilienthal and his particular plan for the southern economy.

When Lilienthal returned for a second term, Morgan sulked. He failed to appear at Board meetings, a "virtual retirement" that left Lilienthal and Harcourt Morgan to attend to the day-to-day chores of running TVA.<sup>12</sup> He returned a month later, but the damage from his absence had been done. Lilienthal spoke to Valley workers, criticizing Morgan's emphasis on handicrafts as marketable southern products. The power director saw private industry as an easy way to bring income to the Valley while allowing TVA to further its own power program. His willingness to work with the private sector did not extend to the utilities, however, and his own career as an attorney for public utilities gave him a strong distrust of their methods. Morgan had fewer qualms about cooperation with companies like Alabama Power if, in return, TVA could bring relief to the area's farmers and townspeople. He was also less hostile towards Wendell Willkie, whose Commonwealth & Southern owned Alabama Power. Morgan later praised Willkie's work to expand the nation's electric grid, even calling him "progressive."<sup>13</sup> Morgan felt increasingly isolated as the lone defender of what he perceived as Roosevelt's original plan. He wrote, "The TVA conflict, in effect, was not between the directors; it was rather between the President's conception of government ... and the more traditional concept of government held by David Lilienthal and Harcourt Morgan."<sup>14</sup> Soon after Morgan's hiatus, these differences came to a head in discussions over the possibility of pooling power with private companies in the Valley.

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<sup>12</sup> "Morgan Not Present for Meeting," *Decatur Daily*, 15 July 1936, 1.

<sup>13</sup> Morgan, *Making of the TVA*, 137-8.

<sup>14</sup> Morgan, *Making of the TVA*, 55, 154.

By 1936, Roosevelt's New Deal agencies were on the defensive against attacks from the private sector, even as the president proved more willing to cooperate in order to further the nation's economic recovery. TVA temporarily defeated its major Valley rivals with the Supreme Court's *Ashwander* ruling in 1936 (see below), but the fight demonstrated the power of utilities to disrupt the agency's operations. That September, Roosevelt began studying the possibility of a power pool for the Valley that would connect the transmission systems of TVA and Alabama Power. Lilienthal agreed that a pool would be an asset for the Valley, even if it meant trading with the agency's enemies, and he drew up safeguards to protect TVA: the government stipulated that power must come from the cheapest sources in the region, transmission lines must be used jointly, and rates must stay at TVA's much lower level. In return, the government would be able to call on a much larger supply of power for towns and industries.<sup>15</sup>

TVA had much to gain from the prospect of a power pool, since it forced private power to give up resistance and accept the agency's gains along the Tennessee River. As Roosevelt later stated, a pool would "smooth out the peaks and valleys of separate system operations" and "postpone the need for investment in new generating facilities."<sup>16</sup> For private power companies, the pool meant a drastic lowering of power rates and a tacit acceptance of competition with government-subsidized electricity throughout the South. Roosevelt approached Wendell Willkie with his idea, but Willkie wanted concessions from TVA. In particular, he expected the government to avoid cities already accepting power from Commonwealth & Southern. In this regard, Willkie's desire for specific territory lay closer to that of Arthur Morgan, who thought

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<sup>15</sup> Lilienthal to Roosevelt, 9 September 1936, 14: "031 White House, 1936," Lilienthal Correspondence Files, TVA Records, NARASE.

<sup>16</sup> Roosevelt, "White House Statement on a Conference to Establish a Southeastern Power Pool," 19 September 1936, in *The Public Papers and Addresses of Franklin D. Roosevelt, Vol. 5: The People Approve, 1936* (New York: Random House, 1938), 372.

the creation of a boundary between TVA customers and private utility customers was the best way to prove that TVA's "yardstick" rates better served its customers.<sup>17</sup>

Morgan made his case publicly in late September, releasing a memorandum giving his "personal views" on the pool. The statement was not issued at the request of the president and did not propose to represent the opinion of TVA. Instead, Morgan outlined his own views of the pool which differed from those of Roosevelt and Lilienthal. Morgan defended the government's responsibility to generate and distribute electric power, but he stressed that private industry should be allowed to continue its own power program and receive "fair compensation" for any investment surrendered as part of the pool.<sup>18</sup> He then went further, defending private power investors for asking for protection for their investments (implicitly legitimizing their lawsuits against TVA). He even called for TVA to define its program in hopes of creating "mutual confidence."<sup>19</sup>

Morgan released a copy of his statement to the public and to Willkie before handing it to Lilienthal and Roosevelt. That same day, Willkie came to a conference on the pool armed with Morgan's memo and ready to utilize the internal conflict to his advantage.<sup>20</sup> At the meeting, Roosevelt and Lilienthal refused to consider a permanent territorial delineation. The president promised to consider a temporary hold on requests by cities to transfer to TVA power, but it was not enough for Willkie, who knew that Chairman Morgan agreed in principle to his demands.

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<sup>17</sup> Lilienthal, *Journals*, Vol. 1, 63-4 (12 September 1936); and "New TVA Policy to End Fight with Utilities Is Considered," *Decatur Daily*, 11 September 1936, 1.

<sup>18</sup> Morgan, "Memorandum on a Proposed TVA and Commonwealth and Southern Corporation Power Transmission Pool," 28 September 1936, 2-5, 218: "951.04 Power Pool of TVA with Private Utilities and Municipalities," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>19</sup> *Ibid.*, 7-8.

<sup>20</sup> Lilienthal to Norris, 4 November 1936, 224: "951.04 Power Pool of TVA with Private Utilities and Municipalities," Curtis-Morgan-Morgan Papers, TVA Records, NARASE. This extended letter provides Lilienthal's account of the negotiations over the power pool and gives a clear picture of how the discussions exacerbated the conflict between him and Morgan.

He would only end litigation if the agency would halt its construction program. Morgan denied that he had supplied his memo to Willkie and the press before the conference, calling it “very inappropriate,” but both the president and Lilienthal remained uneasy about Morgan’s attempts at independent negotiations.<sup>21</sup> Discussions with Willkie continued through the end of 1936, but failed when Commonwealth & Southern refused to end legal attacks on the government agency. As Roosevelt admitted, the utilities were more concerned with “judicial sabotage” instead of “frank discussions” about the mutual benefits of the pool.<sup>22</sup> TVA did not completely end its relationship with private utilities, and the two even came to an agreement on dispensing excess power and sharing some facilities, but cooperation would remain limited and necessity-based. With the failure of the power pool, TVA officials began to look for a final resolution of the private utilities problem; however, the greatest casualty of the power pool discussions was Chairman Arthur Morgan.

Morgan again found himself at odds with his fellow directors and the president when he publicly backed a legal claim by Tennessee Senator George L. Berry, who argued that his TVA-flooded property could have produced real profits if mined. Berry sought compensation for the inaccessible mineral rights, but TVA’s lawyers worked to have the land declared “worthless.”<sup>23</sup> In the wake of the power pool fiasco, Morgan took most of the blame for the disagreement. He refused to concede that his stubbornness injured the Authority’s reputation, suggesting that his presence as chairman was helping contribute to “decency and effectiveness in government.” He supported calls for a congressional investigation into the brewing fight, believing the attention

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<sup>21</sup> *Ibid.*

<sup>22</sup> Roosevelt, “Conferences to Establish a Southeastern Power Pool Are Discontinued,” 25 January 1937, in *The Public Papers and Addresses of Franklin D. Roosevelt, Vol. 6: The Constitution Prevails, 1937* (New York: The Macmillan Company, 1941), 16.

<sup>23</sup> “TVA Chief Is Hit by Colleagues,” *Decatur Daily*, 22 December 1937, 1; and “Norris Seeks Senate Probe of TVA Today,” *Decatur Daily*, 3 January 1938, 1, 2.

would justify his own position instead of Lilienthal's. Morgan was increasingly sequestered from the agency. When he attempted to get "evidence" of his claims against Lilienthal, TVA staff refused to give him any information.<sup>24</sup> On March 22, 1938, Roosevelt informed Arthur Morgan that he had been removed from the TVA Board. He charged the former chairman with "making grave and libelous charges of dishonesty and of integrity," "obstructing the work of the Tennessee Valley Authority," and refusing to give factual evidence of his claims.<sup>25</sup> Harcourt Morgan became the nominal chairman, but Lilienthal drove policy behind the scenes, a result of Harcourt Morgan's reserved personality and Lilienthal's public fame as a proponent of industrial growth and as a defender of public power against the private utilities.

Roosevelt's action ensured a congressional investigation, giving Morgan a chance to express his anger. He recalled that Roosevelt had barely mentioned power when he received the appointment. Instead, the president had stressed economic and social development as a way to improve everyday life in the region: "The picture which he gave me of the possible functions of the TVA was of an undertaking to encourage the decentralization of industry in that region, to help locate people on small farms, and to develop the social and economic resources of the region."<sup>26</sup> In his estimation, the conflict with Roosevelt and the Board did not stem from disloyalty, but instead from a fundamental difference between his plan for economic development and that of Lilienthal. In many ways, Morgan's claims against the agency were justified. TVA had changed under his tenure, and in a direction that he did not anticipate. As the agency began actively working with people in the Valley, and as Lilienthal fought to defend

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<sup>24</sup> "Morgan Hints He Will Not Quit," *Decatur Daily*, 7 March 1938, 1, 2; and Morgan to Roosevelt, 9 March 1938, 3: "White House Correspondence, 1938," Arthur Morgan Papers, TVA Records, NARASE.

<sup>25</sup> Roosevelt to Morgan, 22 March 1938, 3: "White House Correspondence, 1938," Arthur Morgan Papers, TVA Records, NARASE.

<sup>26</sup> Morgan, Rough Draft, "Statement of My Relations with the President, 1 July 1938," 3: "Statement of My Relations with the President, 1 July 1938," A.E. Morgan Papers, TVA Records, NARASE.

public power against its detractors, Roosevelt and many in TVA realized that the idyllic industrial-agricultural utopia Morgan desired would never meet the real needs of the Valley. Determined to raise incomes and create a community of consumers, Lilienthal and Roosevelt agreed on the need to bring in industry to provide jobs for those unable to continue in agriculture. Lilienthal defended his “yardstick” before Congress, able to call on increased demand from municipalities and legal success against Alabama Power to prove that the power program was prospering. A congressional inquiry dismissed Morgan’s charges as “without foundation” and praised the Authority’s regional development programs, specifically noting Lilienthal’s success in proving the feasibility of public ownership of electric facilities.<sup>27</sup> The torch had been passed.

Even as Lilienthal defended his actions to Congress, he also worked to come to a final agreement with private utilities. The most difficult discussions came in Alabama, where Alabama Power faced the loss of its entire Northern Division, the most prosperous of its sections and the area with the greatest potential for future power development. TVA had been gradually expanding in Alabama’s Tennessee Valley, and by the time of the power pool discussions, the agency enjoyed a substantial foothold in the section. The utility found competition with TVA increasingly impossible, especially as more and more municipalities and rural cooperatives attempted to secede from Alabama Power in favor of the Authority’s cheaper rates. By the late 1930s, the myriad southern utility companies were losing customers to public power and fighting a rearguard action to protect their own economic existence. Led by David Lilienthal, TVA successfully defended its own power program. In the process, Lilienthal won national renown, providing public support for the position of authority won in the battle against Arthur Morgan.

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<sup>27</sup> Clipping, *Congressional Record*, 76<sup>th</sup> Cong., 1<sup>st</sup> sess., 1939, in 91: “Complete Summary of the Majority Report,” A.E. Morgan Papers, TVA Records, NARASE.

By 1940, Lilienthal emerged as the new driving force for TVA, both in the boardroom and in the public forum.

Private utilities did not take the creation of a government power agency quietly. Within weeks of the signing of the TVA Act, Alabama Power attempted to reassure its customers in the Tri-Cities that TVA could not compete with its service. In an open letter, District Manager J.T. Jackson reminded citizens of the company's eight years of "faithful, continuous and excellent service." Alabama Power's rates and service ranked among the best in the country and its surplus power ensured that incoming industries enjoyed ample electricity to run machinery. Responding to a growing sentiment in municipalities along the Tennessee for publicly owned power distribution systems, Jackson claimed that cities would tax TVA power (making it more expensive than existing rates) and cut the tax benefits already coming to the area from Alabama Power. The manager promised that his company would "gratefully" accept whatever decision the area leaders reached.<sup>28</sup> Jackson's company could not afford to be so gracious. Throughout the Muscle Shoals debate, Alabama Power was a scapegoat for the purported evils of the "power trust," and given the opportunity, towns across the Valley clamored for TVA's lower rates.

In June 1933, the city of Sheffield voted 660-36 to issue \$150,000 in bonds to finance the construction of a power plant.<sup>29</sup> Florence made a similar decision in "the most momentous" election in the city's history. The *Florence Times* promised that a municipal plant would save the city from "incapable" and "selfish" leadership and allow the citizens to control their own destiny.<sup>30</sup> The vote did not always translate into an easy purchase from the private utilities,

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<sup>28</sup> Jackson, "To the Citizenship of Florence, Sheffield and Tuscumbia," *Florence Times*, 1 June 1933, 5.

<sup>29</sup> "Cities Seek Sheap Power," *Florence Times*, 18 May 1933, 2; and "Power Plant Approved in Sheffield," *Florence Times*, 6 June 1933, 1.

<sup>30</sup> "Municipal Ownership Is a Golden Opportunity – and a Real Test of the People of Florence," *Florence Times*, 27 June 1933, 1; and "Florence Votes Municipal Power," *Florence Times*, 1 July 1933, 1, 3.

which fought to keep a presence in North Alabama. In early February 1934, the city of Decatur began holding meetings with Alabama Power representatives to negotiate the transfer of the power plant to municipal ownership. The groups sparred over costs as Alabama Power valued properties much higher than city leaders, who largely saw the plants as city resources.<sup>31</sup> That same month, Tupelo, Mississippi, became the first city to buy electricity directly from the government. Praising TVA, Tupelo's congressman, John Rankin, used the opportunity to blast the private utilities whose rates were 4,800% higher than the cost of producing the power.<sup>32</sup> Tupelo's contract proved that power from the government could drastically decrease electricity costs and as more and more cities pushed to join TVA's network, the private utilities found themselves on the defensive.

The government agency aided municipalities in their discussions, a fact that irked utilities like Alabama Power. When six Valley cities, including Decatur and Florence, negotiated with the company, TVA backed the municipalities' estimate, which was nearly \$300,000 less than Alabama Power's price. On March 15, Decatur signed a 20-year contract with TVA despite continued uncertainty over the legality of building new transmission lines or buying those of the utility.<sup>33</sup> When city leaders worried that Alabama Power's facilities were in poor condition, TVA agreed to operate the facilities at no cost until the city could take charge of the system.<sup>34</sup> The Authority's assistance pushed the legal boundaries of the organization. The TVA Act allowed the agency to produce power and sell it wholesale to consumers, but it could not

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<sup>31</sup> "Memorandum of Meeting Held on Friday, February 2, 1934, in Decatur City Hall," 41: "095, Alabama Power Co., thru June 1934," Lilienthal Correspondence Files, NARASE.

<sup>32</sup> *Congressional Record* (House), 73<sup>rd</sup> Cong., 2<sup>nd</sup> sess., 1934, 78, pt. 2: 2124.

<sup>33</sup> Llewellyn Evans, TVA, to Lilienthal, 7 March 1934, 41: "095, Alabama Power Co., thru June 1934," Lilienthal Correspondence Files, NARASE; and "TVA Power Contract Is Signed by Decatur," *Decatur Daily*, 15 March 1934, 1.

<sup>34</sup> "Decatur Accepts TVA Plan," *Decatur Daily*, 6 July 1934, 1, 4.

duplicate private utility facilities where they were already available. Instead of permitting the utilities to operate within their service area, Lilienthal worked with municipalities to acquire loans and negotiate more forcefully for distribution rights. Alabama Power and its fellow southern utilities were incredulous. They believed that cities had used government funds to replace or duplicate private power plants, displace workers, and remove a vast swath of property and profit. Years of service to the community, including rural electrification and industrial attraction, were repaid with disloyalty. Not surprisingly, as TVA became more active in fighting private utilities, the companies and their investors resisted.

The first major public challenge came in September 1934 when a group of Alabama Power stockholders represented by Birmingham attorney Forney Johnson filed suit in Athens, Alabama, enjoining the utility from contracting with TVA in North Alabama. The case, named for plaintiff George Ashwander, charged TVA with the unlawful use of federal funds to expand service in an area already represented by a private company. The stockholders also claimed that Lilienthal's rate system was "illusory, deceptive, and merely a device for promoting public ownership of utilities in the area," a charge that would be repeated throughout TVA's early years.<sup>35</sup> As the *Ashwander* case traversed the courts, Lilienthal began talks with Commonwealth & Southern's president, Wendell Willkie. At first, Commonwealth & Southern hoped to buy power from TVA and distribute it, treating the agency as a wholesaler. Willkie promised Lilienthal that the Valley would never accept public power, using Muscle Shoals as an example of the tenuous nature of government investment. Lilienthal told Willkie that if he refused to relent, the government would simply take the power market. When Tupelo contracted for power, TVA seemed to have the upper hand.<sup>36</sup> Commonwealth & Southern even began tentative

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<sup>35</sup> "Suit Attacks TVA Program," *Decatur Daily*, 13 September 1934, 1.

discussions of a property transfer, but events in court changed the tone of the conversation. In March 1935, a judge annulled the sale of Alabama Power properties. The ruling also prevented municipalities from receiving government loans to build or purchase distribution systems in Alabama Power's service area. TVA appealed, but in the meantime, the agency faced an immediate halt to its expansion in the region.<sup>37</sup> Cities struggled to continue the takeover of the municipal power plants, and across the Valley, negotiations with the utility ended abruptly.

After losing in a North Alabama district court, TVA won its appeal and the *Ashwander* case landed in the Supreme Court, which was in the midst of ruling on the constitutionality of other New Deal programs. Johnson made the case for Alabama Power as a public servant of the people of the state. Several counties joined in Johnson's brief (though none were from the Valley), praising the utility for its work bringing textile mills to rural areas with cheap and widespread power. In defense of its agency, TVA's legal team argued that the government had a right to use the water flowing over the turbines at its navigation dams for "commercial manufacture and sale of electricity."<sup>38</sup> In February, the Court handed down an 8-1 decision upholding the right of TVA to sell surplus power created at its dams. The decision validated both the construction of hydroelectric dams and contracts with Alabama Power. George Norris applauded, calling the case a desperate move by the power companies to "pull [their] 'chestnuts' out of the fire."<sup>39</sup> In April 1937, the North Alabama District Court issued an injunction to stop further litigation initiated by Alabama Power. In May, an appeals court refused to hear cases on

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<sup>36</sup> Lilienthal, *Journals*, Vol. 1, Appendix, 711-14.

<sup>37</sup> Lilienthal to Marvin H. McIntyre, Secretary to the President, 1 January 1935, 13: "031 White House 1935," Lilienthal Correspondence Files, NARASE; Charles E. Hoffman, Assistant Secretary, TVA, to Alabama Power Company, 25 January 1935, 41: "095, Alabama Power Co., 1935," Lilienthal Correspondence Files, NARASE; and "TVA's Purchase Contracts Held Invalid by Grubb," *Decatur Daily*, 4 March 1935, 1, 2.

<sup>38</sup> "Fate of TVA before High Court," *Decatur Daily*, 19 December 1935, 1, 2.

<sup>39</sup> *Congressional Record* (Senate), 74<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1936, 80, pt. 3: 2416.

the constitutionality of government financing of municipal power projects and lifted all injunctions against the Authority.<sup>40</sup> The decisions solidified TVA's position in North Alabama and paved the way for the agency to provide power directly to customers throughout the region. For Alabama Power, the defeat proved costly.

TVA's ascendancy weighed on Thomas Martin. In October 1936, Alabama Power's president pleaded his company's case to the *Manufacturer's Record*. His company employed thousands of men and women, created wealth for the state through its industrial recruitment campaign and tax revenues, and benefited society with the "pioneer efforts" of its hydroelectric development. The thrust of his argument lay in a criticism of TVA's "distrust and hatred" for private power. With government funding, the agency avoided many of the costs and risks of the market while stealing Alabama Power's customers.<sup>41</sup> The fight with TVA made the utility's future uncertain. Alabama Power planned nearly \$8,000,000 in expansions in the state, but "subsidized government competition" forced the company to cut expenditures and focus on system maintenance.<sup>42</sup> Martin's protests fell largely on deaf ears. In 1936, Alabama Power sold its distribution system in Florence to the city and finalized the sale of its transmission lines and substations in North Alabama. The next year, the company sold facilities to Tusculumbia. The city of Sheffield, unable to come to terms, began building its own distribution system.<sup>43</sup> With the help of Hill and Sparkman, the region's textile center, Huntsville, began negotiations to

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<sup>40</sup> "TVA Advocates Hail Davis Edict," *Decatur Daily*, 16 April 1937, 1; "Power Company Appeal Denied," *Decatur Daily*, 10 May 1937, 1; and "Sweeping Victory Is Won by TVA," *Decatur Daily*, 14 May 1937, 1.

<sup>41</sup> Martin, "Holding the Scales in Equal Balance," (Reprint), *Manufacturer's Record*, October 1936, 41: "095, Alabama Power Co., 1936," Lilienthal Correspondence, NARASE.

<sup>42</sup> "Early Solution of TVA-Power Problem Is Urged by President Thomas Martin," *Decatur Daily*, 15 January 1937, 8.

<sup>43</sup> "Lines Bought Today by TVA," 1, 2; and J.T. Jackson to "Our Customers," 25 March 1937, 41: "095, Alabama Power Co., 1937-1941," Lilienthal Correspondence, NARASE.

purchase its municipal system in 1938.<sup>44</sup> In the span of five years, Alabama Power lost control of its entire Northern Division.

In 1938, Commonwealth & Southern began final discussions with TVA to create a permanent boundary for utility service in Alabama. Despite calling a Valley-wide sell-off a “last resort in a desperate situation,” Willkie suggested setting up a three-man commission to determine the values of properties TVA wanted to obtain.<sup>45</sup> In Alabama, Martin sought to prevent TVA from expanding south towards Birmingham. In early 1939, Bessemer and Tarrant on the outskirts of Birmingham drew plans to build their own plants for TVA power.<sup>46</sup> Threatened with the loss of its largest market, Alabama Power prepared to set concrete boundaries to stop the Authority’s southern expansion. TVA reached a tentative agreement with the utility, purchasing the property of the utility in Colbert, Limestone, Lawrence, Morgan, Madison, Cullman, Marshall, Jackson, and Cherokee counties, except where municipalities had duplicated existing systems (as in Decatur, Hartselle, and Courtland). TVA was responsible for paying almost \$2 million for the property, and the municipalities and cooperatives in North Alabama covered the final \$2.6 million.<sup>47</sup> Alabama Power lost 14,000 customers and \$400,000 in annual revenue. Local municipalities received control of their distribution systems, and in areas like Decatur which built a duplicate system, the utility sold or salvaged the old equipment and facilities.<sup>48</sup>

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<sup>44</sup> Sparkman to Lilienthal, 24 March 1938, and Lilienthal to Sparkman, 7 September 1939, 9: “Madison County: Huntsville Projects, 1939-43,” Sparkman House Papers, Hoole.

<sup>45</sup> “Lilienthal Avers TVA Willing to Talk Over Power Line Purchase,” *Decatur Daily*, 18 January 1938, 1, 2.

<sup>46</sup> “TVA, APC Parley Next Week,” *Decatur Daily*, 7 February 1939, 1.

<sup>47</sup> J.A. Krug, Chief Power Engineer, to Gordon Clapp, General Manager, 20 December 1939, 232: “951.3113 Alabama Power Co.,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

The decision ended seven years of constant fighting between TVA and private utilities, allowing the agency to concentrate on long-term plans for electric development. Yet perhaps even more importantly, the struggle focused an inordinate amount of attention on David Lilienthal's Power Division, and many came to associate TVA with hydroelectric generation and distribution. Lilienthal realized that power was stealing the public spotlight away from projects like water control and soil conservation, but he was unconcerned. He noted that his success in pushing power had come from stressing the "human factor," bringing public attention to a problem that would otherwise appear overtly technical. Lilienthal suggested a more active campaign on the part of other aspects of the TVA program, mirroring his own success.<sup>49</sup> Meeting with Roosevelt in November 1939 to discuss the problem, he admitted to being "disappointed" that TVA could not arouse public sympathy for other aspects of the Authority's program and suggested a brochure that would show how the Valley had "moved ahead farther and faster relatively than other sections of the country." He later recalled that, at the time, Roosevelt's views still fit largely with Arthur Morgan's, calling the president's vision similar to "some of [Morgan's] screwiest brain children." Lilienthal, however, had "little stock in that whole line of ideas"<sup>50</sup> Despite pronouncements to the contrary, Lilienthal truly felt that making electricity cheap and more widely available would do more for the people of the Valley than any other aspect of TVA's original vision. As he took more and more of a leadership position, his views would play a major role in the future of the agency.

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<sup>48</sup> TVA Press Release, "Alabama Purchase," 24 February 1940, 41: "095, Alabama Power Co., 1937-1941," Lilienthal Correspondence, TVA Records, NARASE.

<sup>49</sup> Lilienthal, *Journals*, Vol. 1, 106-7 (16 April 1939), and 110 (9 June 1939).

<sup>50</sup> Lilienthal, *Journals*, Vol. 1, 141 (2 November 1939).

By March 1940, David Lilienthal could point to real examples of economic advancement in Alabama's Tennessee Valley. The Muscle Shoals nitrate plants had produced over 233,000 tons of fertilizer, traffic was steadily increasing on the Tennessee River, and demand for power led TVA to consider expanding its facilities at Wilson Dam. More importantly, the state's industrial development was "just beginning" as companies began to realize the area's "vast resources," particularly its cheap electricity and employable people.<sup>51</sup> Statements of this kind undoubtedly proved little surprise to TVA's customers. Almost from his appointment in 1933, Lilienthal had stressed the importance of using electricity as a foundation for economic development. In the Valley, his Power Division spread electricity to homes and farms, but also worked to interest industrial customers in the cheap rates the government agency could offer.

For Lilienthal, only industry could provide the income boost needed to revive the southern economy. At a symposium in Mobile, Alabama, Lilienthal listed the goals of his agency's industrial development program. Industry payrolls would increase personal income, which would then flow into communities, paying for needed goods and services. With more money, southerners would be able to buy the goods produced in new factories, ensuring even further growth as more companies located near an expanding market. TVA would work with southern businessmen, officials, engineers, and technicians, hoping to create a leadership cadre that would help solve particularly southern problems – training the "men and institutions that can grow and develop to meet the very great, almost overwhelming, opportunities and problems of sound industrial development."<sup>52</sup> Succinctly put, this was Lilienthal's development philosophy. He saw TVA as a kind of catalyst, causing southerners to work for the development of their own

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<sup>51</sup> "Lilienthal Hails Valley Growth," *Decatur Daily*, 26 March 1940, 1, 2.

<sup>52</sup> Lilienthal's speech, "New Industries for the New South," 20 March 1941, was included in the *Congressional Record* by John Sparkman. See *Congressional Record* (Appendix), 77<sup>th</sup> Cong., 1<sup>st</sup> sess., 1941, 87, pt. 11: A1280-1.

communities. In his own words, his goal was “the re-establishment of human beings on their own feet.”<sup>53</sup> TVA proved that public and private cooperation in the economy could “produce freedom and opportunity,” providing mutual support and encouragement to create national growth.<sup>54</sup> Industry paid workers, providing a direct injection of money into the economy. TVA oversaw resource management and ensured that companies had the minerals, water, and most importantly, power, needed to run the assembly lines, while ensuring that factories met the standard of life that the agency hoped to implement across the country.

Lilienthal saw TVA as an amalgam between public agency and private company. He wanted to make the Authority as independent as possible, a notion that became increasingly important as his congressional opponents sought to rein in TVA’s actions by cutting funding and making officials accountable to federal oversight. In fighting Commonwealth & Southern, he defended the agency’s right to sell power for domestic and commercial use. He marketed southern resources to potential customers, literally advertising TVA’s power rates to companies interested in relocating. In 1940, Lilienthal suggested selling TVA bonds as a means to retire debt and return profits that could be distributed to its customers, effectively ending the constant appropriations requests that funded programs. He called for building a supply of aluminum that could be stored and distributed to the government when necessary.<sup>55</sup> Lilienthal even sought to copy the success of some corporations in crafting a specific image. TVA needed positive publicity to show what it had done for the Valley, and noting the success of ALCOA’s public relations department in disseminating information on the aluminum company’s war effort, he

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<sup>53</sup> Lilienthal, *Journals*, Vol. 1, 212 (9 September 1940).

<sup>54</sup> *Ibid.*, 213-4.

<sup>55</sup> Lilienthal, *Journals*, Vol. 1, 291 (26 March 1941). Lilienthal’s bond proposal would be rejected, though by the mid-1950s, self-financing would play a major role in TVA’s growth.

suggested a campaign of “public education” consisting of pamphlets, data booklets, library programs, and press articles.<sup>56</sup> Lilienthal proved very willing to embrace aspects of the private sector to advance his agency’s cause.

Yet Lilienthal did not want to relinquish the benefits that came from being an arm of the federal government. He believed that while some individualism could be good, complete privatization threatened to reverse growing prosperity by valuing profit over cooperation.<sup>57</sup> Lilienthal even worried that his power program would soon come to resemble the private utilities he had driven out of the Valley. Revenue from electric contracts provided TVA with a means for growth, but it was also a symbol of its true benefits for consumers (the “yardstick”). Yet as the Authority’s leadership negotiated with other government entities, the Board found itself calculating the risk of supplying electricity under indefinite terms, and even worse, competing with TVA’s own municipalities to power defense plants. Lilienthal demanded inter-governmental contracts instead of publicly debated negotiations, a stance resulting in numerous conflicts (see chapter 5).<sup>58</sup>

He also understood that as a government agency, TVA could act to encourage community development without concern for repercussions. TVA fostered unionization in a decidedly anti-union climate. It promoted hiring black employees, albeit in the lowest paying positions. Unlike most private organizations, the Authority provided for the needs, expressed and otherwise, of its workers and their families through training programs, medical care, and schooling for adults and children. This was the influence TVA could have on a community, an influence only possible as a government agency, backed by massive resources, funding, and an organizational ability

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<sup>56</sup> Lilienthal, *Journals*, Vol. 1, 372-4 (13 August 1941).

<sup>57</sup> *Ibid.*, 296-8 (2 May 1941).

<sup>58</sup> *Ibid.*, 394-5 (22 October 1941).

unmatched by any single corporation. If Lilienthal planned to reverse decades of economic decline, he needed to guide TVA in a program that borrowed from both the private and public sector.

Where Lilienthal valued TVA's public position, he largely followed the Authority's initial mission as laid out by Roosevelt and Arthur Morgan, particularly in two areas: labor and race. He believed that his agency should set an example for employment practices that could be replicated in new industries locating in the area. TVA continued to emphasize training and education to create a more skilled, more adaptable work force to staff both government agencies and private corporations relocating to the Valley. The lack of a skilled labor force in the Valley troubled Lilienthal, who understood that higher-paying jobs required a basic level of education unavailable to many southern workers. He noted that this problem had seriously hampered efforts to boost Valley incomes. Vultee Aircraft in Nashville informed the War Plant Site Board that it was unable to expand its operations, even with increased defense demand, because "Southern labor was not readily teachable for the requirements of aircraft production." Such statements made the hope of future defense investment in the South "dismal."<sup>59</sup> Lilienthal understood that TVA was well on the way to solving the problem with proven training programs, begun by Morgan, giving locals the skills needed to build and operate hydroelectric dams. The agency simply needed to find trainers specialized in the technical knowledge required in new industries, particularly those involved in the growing defense effort.<sup>60</sup>

In fact, TVA had already begun moving in that direction. Director of Personnel George F. Gant recommended that TVA synchronize its employment practices with those of other government agencies, meeting both Selective Service and Employment Service demands while

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<sup>59</sup> Lilienthal, *Journals*, Vol. 1, 461 (31 March 1942).

<sup>60</sup> *Ibid.*, 462.

maintaining their own recruitment and education facilities.<sup>61</sup> A year later, Gant's department reported increasing success in wartime training. By April 1943, 1,690 workers had participated in formal training programs leading to promotion, and an additional 1,169 workers had enrolled in classes. TVA trained a number of Valley women as stenographers, lab technicians, and engineering "draftsmen," not to mention 537 employees training to operate the plants at Muscle Shoals.<sup>62</sup> Once again, the agency proved that Valley residents, given the opportunity, embraced employee training, just as they had in dam construction villages in the 1930s. Understanding the importance of skilled laborers, TVA officials continued to stress training and education, hoping to create a new generation of southern laborers ready to assist the agency's programs or move easily into the private sector.

Perhaps the most important way in which Lilienthal's leadership continued the labor policies of Arthur Morgan was in his attitude towards unionization. From the outset, Morgan encouraged worker organization on TVA projects. When creating hiring and employment policies, Morgan insisted on consulting with labor organizations, and ensured that his agency would support collective bargaining and union independence. He remained proud of his efforts to include unions in the creation of TVA policy: "So far as I know, this was the first occasion in this country where the rights and responsibilities of labor and management for all crafts on large public projects were arrived at by negotiation and expressed in an inclusive labor policy."<sup>63</sup> For Morgan, unionization was more than just a means to provide an organized, self-policed labor

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<sup>61</sup> Gant to Clapp, 31 March 1942, 127: "210.14 Hire of Employees thru 1950," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>62</sup> Training Staff, Personnel Dept., TVA, "Report on Employee Training in TVA during Wartime Expansion," 28 April 1943, 122: "920.001 Training and Educational Programs in General," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>63</sup> Morgan, "The Closed Shop on Public Works," 17 November 1937, 10: "Labor Policies – Addresses and Statements by TVA Officials," A.E. Morgan Papers, TVA Records, NARASE.

force. Cooperation with unions was a “yardstick” as much as Lilienthal’s power rates – a means of “proving” to southern companies that labor organization could be a beneficial, even profitable aspect of the new southern economy.

By the time TVA officially released its labor policy, Morgan had left in disgrace. Yet the agreement incorporated the former chairman’s opinions on the value of a unionized workplace. TVA and the Tennessee Valley Trades and Labor Council released their “General Agreement” in August 1940, just as the agency escalated its wartime operations. The “Council”, an amalgamation of several American Federation of Labor-affiliated unions, became the sole representative for workers on TVA projects, an exclusivity that provided for a concrete set of negotiating bodies and policies even as it limited the workers’ options.<sup>64</sup> With its public nature, combined with its increasing importance in powering the defense program, TVA convinced the Council to waive its right to strike during disputes. In return, the federal agency agreed to maintain operating conditions in times of unrest. TVA specifically noted the right of workers to organize and choose their own leadership. Unions determined their own jurisdictions and job requirements without interference from management, and workers created their own work schedules, though the Authority reserved the right to delegate jobs to those workers most capable of completing tasks. The Agreement also specified the mechanism for settling workplace disputes. Council representatives met directly with TVA’s personnel director. Claims not

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<sup>64</sup> The Council included the following unions: The Brotherhood of Painters, Decorators and Paperhangers of America; the International Brotherhood of Boiler Makers, Iron Ship Builders, and Helpers of America; the International Brotherhood of Blacksmiths, Drop Forgers and Helpers; the International Association of Machinists; the International Brotherhood of Electrical Workers; the International Hod Carriers’, Building and Common Laborers’ Union of America; the International Union of Operating Engineers; the Sheet Metal Workers’ International Association; the International Union of Wood, Wire and Metal Lathers; the Operative Plasterers’ and Cement Finishers’ International Association; the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada; the United Brotherhood of Carpenters and Joiners of America; the Bricklayers’, Masons’, and Plasterers’ International Union of America; and the International Brotherhood of Teamsters, Chauffers, Warehousemen and Helpers of America. See “General Agreement between the Tennessee Valley Authority and the Tennessee Valley Trades and Labor Council,” 6 August 1940 (Revised 26 June 1949), 135: “254.1 Union Management Cooperative Plans, 1949-1955,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

settled in a face-to-face meeting were recommended to an “impartial referee” appointed by a joint Board of Adjustments consisting of two representatives each from TVA and the Council.<sup>65</sup>

The agreement was, at heart, a compromise between unionized workers and government management. It encouraged worker organization in a region actively hostile to unionization in textile mills and tenant fields, and both sides hoped it would serve as an example to companies across the South, proving that union agreements could facilitate worker and management cooperation without affecting production. Lilienthal praised the wartime operation of the General Agreement. In late 1943, he referred to wage negotiations with the Council as the “briefest conference in our history.” An unnamed “old, white-haired boilermaker” agreed, “I never sat through a wage negotiation like this in my whole life, where you talk facts all the time, just facts and no cussing and storming around.”<sup>66</sup>

The Agreement only covered trade labor organizations, and TVA officials soon realized that the negotiation system would have to be expanded to include salaried and nonunionized employees. Salaried employees were represented by a number of different unions, including the AFL’s Federation of Government Employees, the CIO’s Federal Workers of America, and the American Federal Office Employees, making cooperation difficult at best. The Authority created the “TVA Annual Employees” to encompass many salaried workers, but some refused to join, preferring their individual unions. In the end, the Authority, admittedly “pioneering” negotiations with non-trades unions, approached talks on a case-by-case basis with specialist unions in different areas.<sup>67</sup> Non-unionized workers were another concern. In order to obtain

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<sup>65</sup> *Ibid.*, 2-8.

<sup>66</sup> Lilienthal, *Journals*, Vol. 1, 617 (24 November 1943).

<sup>67</sup> Clapp to Board, 30 May 1942, 135: “254.1 Union Management Cooperative Plans thru 1946,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

their cooperation, the agency turned to corporate propaganda. TVA stressed the importance of each individual worker in “regional and national development and the war effort.”<sup>68</sup> Programs highlighted the agency’s history and its attempts to correct the social and economic conditions of the Valley. TVA’s leadership envisioned “maximum employee morale,” creating a work environment that would encourage willful participation while discouraging dissension in the ranks.<sup>69</sup> The patriotic appeal fit nicely with TVA’s larger training and education program – workers learning particular skills or trades would also receive instruction in their “purpose,” as well as the role of their division and the larger goals and ideology of the Authority. TVA’s wartime labor experience seemed to prove the wisdom of its program. The agency contributed greatly to defense production in the Valley, with no major work stoppages or production slowdowns. By the mid-1940s, Arthur Morgan’s vision of management-labor cooperation seemed to be a success.

Lilienthal also shared Morgan’s attitude towards the Valley’s African American residents. TVA’s hiring practices stipulated that all work forces include minority workers at the same proportion as the surrounding population. In the 1930s, the agency hired black clearance crews in reservoir areas, black construction workers on dam projects, and staffed production lines with black workers. Even with this active attempt at inclusion, the Authority largely followed southern hiring practices. It segregated clearance crews, and where blacks and whites worked together, facilities were segregated and black workers staffed the lowest level jobs. Morgan and the rest of TVA’s leadership defended the agency’s racial policy as beneficial to all

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<sup>68</sup> Clapp to Board, 12 May 1942, 113: “Training and Educational Programs in General thru 1949,” Pope-Paty Papers, TVA Records, NARASE.

<sup>69</sup> *Ibid.*

workers, despite demands from black communities for more input into programs.<sup>70</sup> The war provided a new arena for discussion on minority participation in TVA's activities, and in the 1940s, Lilienthal and his division chiefs found themselves echoing Morgan's statements, even as black employees pushed harder for change.

Lilienthal shared the prejudices of many "liberal" whites in his generation. He believed that blacks would obtain equal rights through economic opportunity, not legislation targeting unequal and unfair legal and social practices. He seemed truly concerned about the inability of black southerners to participate in the agency's development program. He admitted to Frank McSherry, the Deputy Director for Labor Supply and Training on the War Production Board that the "disturbing" employment problems faced by blacks were one of the main sources of resistance to the full utilization of southern manpower in the war industry.<sup>71</sup> However, Lilienthal's personal ideology limited possible solutions. The chairman recorded a 1942 conversation with his daughter, Nancy, who grew upset over a "White Only" sign at the TVA picnic ground on Norris Lake, near Knoxville. Lilienthal noticed a decidedly "radical" streak in Nancy, even more "liberal" than he and his wife, who considered themselves comparatively left-leaning. He cautioned Nancy to see racial attitudes as a "fact," even if those views were based on meaningless "social distinctions." His fatherly advice underlined his racial attitude: "The thing to do was to try, patiently and with considerable difficulty, to remove some of the causes of race feeling, but to stand like a rock on the right of each Negro to an opportunity to work and to learn as much as he was capable of learning, on his merits."<sup>72</sup> Only those African Americans

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<sup>70</sup> See Chapter 3 for examples of African American demands for inclusion in TVA programs.

<sup>71</sup> Lilienthal to McSherry, 11 May 1942, 68: "210.2221 Negroes or Colored," Pope-Paty Papers, TVA Records, NARASE.

<sup>72</sup> Lilienthal, *Journals*, Vol. 1, 516 (14 July 1942).

willing to take advantage of the opportunities presented to them could prove their inherent worth. This was the philosophy behind his agency's minority policy.

TVA examined minority employment in the agency on the eve of World War II at the request of the Personnel Department. Director Gant discovered that during April 1941, black employment amounted to 10% of the total workforce. However, of that percentage, only 6% of annual trades positions (permanent skilled jobs) and less than 4% of salaried positions were staffed by African Americans. Of the "relatively permanent" trades jobs, 14% of workers were black, and 15% of the temporary hourly workers were black. Clearly, African American workers were not receiving their share of skilled, stable jobs. The Personnel Department noted that while the construction program continued, maintaining the "proportion" rule would be easy, since many low-skilled jobs would be available. However, with construction winding down across the Valley, the agency would soon face the challenge of increasing the number of black workers in annual salaried and permanent trade positions.<sup>73</sup>

An adequate level of black employment was not the only looming problem, and in fact, pointed to a much larger problem: the inability of TVA to create a definite program towards the inclusion of blacks into the larger organization. Supervisors refused to employ black workers on white crews, leading to segregated workforces in direct violation of Executive Order 8802, which required an end to discriminatory practices in federal agencies. TVA had the opportunity to demonstrate the ability of a large scale organization to fully integrate its workforce and provide real opportunities for economic and social advancement for all Valley residents, though in reality, the Authority needed to actively address continued racial inequality to become a true "yardstick" for race relations in the South.

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<sup>73</sup> Departmental Committee on Race Relations, "Placement Opportunities for Negroes," 25 August 1941, 2-3, 68: "210.2221 Negroes or Colored," Pope-Paty Papers, TVA Records, NARASE.

Across the country, African Americans used the war to demonstrate their contributions to society and their discontent with being treated as second class citizens. Calling for victory over racism abroad and at home, black communities demanded political rights, economic opportunity, and social equality in numerous ways. In April 1942, Archibald MacLeish of the Committee on War Information asked federal agencies, including TVA, to consider ways to improve African American morale, a clear indication that the “Double V” campaign was being heard in Washington. Lilienthal responded by reiterating the proportion policy and giving a vague promise that his agency would create “occupational opportunities” for black residents as soon as “a workable regard for the existing occupational patterns and customs would permit.” He noted that some African Americans attended TVA training programs and that, hopefully, this would lead to steady employment for black workers even after construction employment declined.<sup>74</sup> Lilienthal’s response exhibited a decided misunderstanding of black protest, and TVA soon faced criticism from black leaders unhappy with the agency’s continued reliance on its prewar labor policies.

Within weeks of receiving MacLeish’s inquiry, an agent of the United Brotherhood of Carpenters and Joiners complained to the Federal Employment Practices Commission that TVA had certified black carpenters as qualified to work for the agency but failed to call any to jobs.<sup>75</sup> These skilled laborers were just the permanent trade employees Gant wanted to represent minority groups on the agency’s staff, yet confronted with claims of discrimination, he refused to follow his own advice. According to Gant, TVA considered merit and efficiency above all else, and the proportion rule simply served as a guide, not a barrier to qualified workers. Skill alone

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<sup>74</sup> MacLeish to Lilienthal, 8 April 1942; and Lilienthal to MacLeish, 19 May 1942, 68: “210.2221 Negroes or Colored,” Pope-Paty Papers, TVA Records, NARASE.

<sup>75</sup> George M. Johnson, Assistant Executive Secretary, President’s Committee on Fair Employment Practice, to Harcourt Morgan, 20 April 1942, *Ibid.*

could not ensure that a specific worker would be placed on a job; in particular, the Personnel Department had to consider “community relations” when hiring. Gant pointed to Kentucky Dam where conflict over the hiring of black workers closed the project for several days, and Appalachia Dam, where security forces had to protect black flagmen from “threatened action by residents of that area,” as evidence that southern racial prejudices had handicapped the Authority’s efforts. Gant asserted that TVA did not use racial discrimination in its hiring practices. Given the specific claim from skilled carpenters, he noted that while none of the 15 qualified carpenters were hired, the agency had received 3,900 applications from carpenters, with only 1,900 total carpentry jobs, one of which was staffed by a black carpenter.<sup>76</sup> Faced with evidence that TVA’s racial policy had failed to include blacks in the revitalization of the southern economy, Gant stubbornly stuck to the original proportional guideline. The agency, though promising the government to increase the number of permanent skilled workers in its ranks, did not address the problem.

Policies that reinforced segregation also affected the lives of black workers on TVA projects. In late 1945, National Association for the Advancement of Colored People (NAACP) President Walter White wrote the Authority, inquiring about housing conditions on Valley projects. General Manager Gordon Clapp responded for Lilienthal, describing TVA’s policy of supplying housing, education, recreation, and medical care for all workers. He noted that black workers and their families lived in separate-but-equal housing, either in existing communities or in the “limited housing” (dorms or cottages) TVA supplied at job sites. Clapp acknowledged that his agency’s policy conformed to “established laws and customs in the area which ... cannot be ignored without detrimentally affecting TVA’s ability to carry on its construction and

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<sup>76</sup> Gant to Lawrence W. Cramer, Executive Secretary, President’s Committee on Fair Employment Practice, 8 May 1942; and Gant to Johnson, 11 May 1942, in *Ibid.*

operating responsibilities.” As the construction program came to a close, the agency relied on existing communities to house workers, ensuring that black workers were relegated to local black neighborhoods, schools, and medical centers.<sup>77</sup> Here, stated plainly, was TVA’s real dilemma. The agency needed to ensure cooperation among local leaders in order to continue with construction projects, resource management, and other development programs. The Authority insisted on the hiring of black workers, but only as far as allowed by the community. In accepting the status quo, TVA forfeited any chance of providing real leadership. Only in cases of impending crisis would the agency act to calm fears.

Black workers employed on TVA projects experienced discrimination first-hand. The Labor Council provided little protection for black workers, who found themselves with few allies among the mid-level managers and project supervisors overseeing daily work life. Separate construction and clearance crews solved this problem in the earliest days, but as the agency faced demands to integrate its workplace, conflict became widespread. The problems that affected Kentucky and Appalachia Dams also occurred in North Alabama. In 1943, three African American men were appointed as guards at Wilson Dam. White guards threatened to “riot” if their black co-workers staffed the positions, even promising to “throw the negroes in the river” if they wore their uniforms or strapped on guns. Harold Ponders, an Office of Price Administration official in Florence, defended the white workers, blaming FEPC legislation for allowing the African American community to “progress too rapidly and to [sic] far.” He asked Congressman John Sparkman to “do something for the benefit of these white guards and the other white employees at TVA.” The congressman responded with surprise, promising Ponders that he would discuss the problem with Lilienthal who, he thought, would never hire black

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<sup>77</sup> Clapp to White, 24 September 1945, 96: “622.1 Houses,” Pope-Paty Papers, TVA Records, NARASE.

workers “without regard to the place or type of work” or “where friction might result.” He asked Lilienthal to reconsider employing black workers in precarious positions.<sup>78</sup>

Lilienthal promised that the hiring had been made with careful consideration as to the proportion of African Americans in the Wilson Dam community and the character of those employed. The guards had proven their ability in previous occupations, had gained the respect of their community, and “were known personally to a large number of the Authority’s employees at Wilson Dam.” TVA held a joint discussion with “over 200 members” of the Safety Service, calming fears, and the issue faded from record.<sup>79</sup> The incident reveals the difficulties faced by black workers under TVA’s racial policy. True, the agency worked to include the African American community in its hiring practices, a goal that few other companies or agencies espoused. Yet by working within existing southern racial boundaries, the agency failed to allow black workers access to the supervisory and management positions that would help guard against discrimination and prejudicial violence. Instead, black workers continued to occupy the lowest rungs of the TVA ladder, forced to rely on the willingness of officials like Lilienthal and Gant to defend their right to work.

The continuance of Morgan’s labor and racial policies did not stem from Lilienthal’s fond memories of the former chairman, or from some unwillingness to change the direction of TVA’s program. Instead, the earlier policies fit within Lilienthal’s objectives for the Valley’s development. TVA’s labor agreement exemplified how cooperation between workers and management could result in a more efficient, fully functional workforce. The policy had real limits; TVA tried to delegate which unions would represent workers and used its status as a

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<sup>78</sup> Pounders to Sparkman, 3 April 1943; Sparkman to Pounders, 6 April 1943; Sparkman to Lilienthal, 8 April 1943, 35: “TVA: Misc., 1943,” Sparkman House Papers, Hoole.

<sup>79</sup> Lilienthal to Sparkman, 23 April 1943, 35: “TVA: Misc., 1943,” Sparkman House Papers, Hoole.

government agency to curtail more severe avenues of protest. The General Agreement provided workers with a promise of self-government and the agency with a guarantee of uninterrupted production. Workers kept jobs, income flowed into communities, and thousands of “happy” employees provided great publicity for Lilienthal’s industrial recruitment plans.

TVA also hoped to produce a “yardstick” for race in the Valley. The agency made sure to hire black workers in proportion to the relative size of the community’s African American population. By 1940, the proportion rule became harder and harder to maintain as the low-pay, low-skill jobs usually staffed by black workers on construction and clearance crews declined. The agency promised to include more African Americans in training programs but refused to challenge the region’s racial status quo, deciding instead to maintain segregation until forced to change, and then only hiring black workers if the larger community accepted the decision. Instead of using its federal status to enforce equality, Lilienthal and his personnel staff argued that by training for new skills and increasing their earning power, blacks would realize economic equality, which would in turn, lead to political and social gains. TVA provided the foundation for that change, but black employees had to do the hard work themselves. Lilienthal kept Valley leaders as happy as possible. In return, they cooperated whole-heartedly in bringing industry to the region to use TVA power.

Yet, despite a willingness to continue Arthur Morgan’s labor and racial policies, David E. Lilienthal was determined to redirect the Authority’s work in the Tennessee Valley. His growing relationship with private industry, based largely on his oversight of electric production and distribution, illustrated this new approach. After a decade-long struggle with private utilities and an intense internal fight for control of the Board, Lilienthal found himself perfectly positioned to foster new relationships with Valley leaders. In particular, he turned to business leaders in towns

like Decatur and Florence who seemed to share his desire for economic revitalization by means of industrial growth. Negotiations over municipal power distribution between local leaders and the Board and created a shared sense of purpose between Lilienthal and the Valley. With Morgan gone, businessmen found a more willing partner in their desire for community growth. This transformation became strikingly apparent due to TVA's wartime service. The demands of defense industries across the Valley reinforced Lilienthal's goals and provided a perfect opportunity for power production and industrial recruitment. Local leaders and agency officials cultivated a powerful relationship during World War II, and the cooperation and contestation of that period further drove the South into the modern, national economy.

## CHAPTER 5

### “We Have These Things Coming to Us”: The Tennessee Valley Authority, 1941-1945

When many people are thinking and working on the same problems and all are pulling together in the same direction, there is created a wealth of manpower, ingenuity, and ideas which could never be supplied by a limited number of federal or state personnel.<sup>1</sup>

In October 1939, David E. Lilienthal submitted a report to President Franklin D. Roosevelt, listing the ways in which TVA could be useful to the nation during an emergency. Some of his suggestions were hardly surprising. In the past six years, the Authority built a vast regional network of technicians and instructors who could help implement large-scale programs quickly and efficiently. Lilienthal also boasted a proven record of success in working with local leaders to remove families from reservoir areas, organize aid, and facilitate resource conservation. However, he went on to suggest much more drastic measures. A national defense emergency could provide “the occasion for a permanent improvement of [TVA’s] regional house-keeping.” TVA might have to shelve efforts in soil fertility, forestry, and other “exhaustible” resources, but in doing so, the Authority would undoubtedly realize the “best feasible adjustment of resources to production quotas to the end that with the passing of the emergency, instead of a depleted region super-imposing its woes upon the inevitable shock of

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<sup>1</sup> Title quote from Barrett Shelton to Lister Hill, 20 September 1939, in Box 162:9, Lister Hill Papers, Hoole; Introductory quote in Howard K. Menhinick, “A Suggested Program for the Alabama State Planning Board: A Statement Prepared at the Request of the Governor of “Alabama,” 10 August 1944, 1-3, 59: “092 Alabama A-Z,” Pope-Paty Papers, TVA Records, NARASE.

‘normalcy,’ a virile, well-balanced economy shall assist the nation in its orderly return to peacetime pursuits.”<sup>2</sup>

Such a statement would never have emerged from Arthur Morgan’s Board. Lilienthal was proposing the wholesale scuttling of several TVA activities, resource conservation programs that had been integral to the original purpose as laid out in the TVA Act of 1933. As TVA prepared to go to war in the 1940s, Lilienthal proved very willing to abandon Morgan’s communalism. TVA produced power for defense industries, public and private, bringing jobs for the unemployed and wages for the destitute. Lilienthal, who was named chairman of the Board of Directors in 1941, built new relationships with leaders across the Valley, encouraging them to use wartime necessity to implement wide-scale industrial recruitment and community development. By 1945, Valley residents no longer saw the Authority as a force for conservation, flood control, or social and cultural instruction. The postwar TVA became a regional arbiter of economic development, peddling electricity as a means of bringing industry to towns and communities along the Tennessee River. In conjunction with community leaders throughout the Valley, Lilienthal’s TVA ushered the Valley into the Sunbelt South.

As the head of TVA’s Power Division, Lilienthal made his personal vision for the Valley’s economic development perfectly clear: widespread power usage by industries would boost incomes and bring prosperity to towns and farms across the South. By 1938, the removal of Arthur Morgan and the increasingly successful fight against private utility challenges gave Lilienthal the momentum to enact his plan for the Valley. Yet the real transformation in TVA’s program came with the defense mobilization surrounding World War II. The agency witnessed a drastic increase in demand for power, particularly by aluminum plants like ALCOA and

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<sup>2</sup> Lilienthal to Roosevelt, 4 October 1939, 88: “095, National Defense – General,” Lilienthal Correspondence, TVA Records, NARASE.

Reynolds Metals, which were ramping up production on government contracts. At the Muscle Shoals plants, wartime need increased employment as men and women found jobs producing nitrates for munitions. Soon, Valley residents, like many other southerners, came to equate war factories with economic development, and TVA faced numerous demands for assistance in bringing industry to the region.

The transition was not an easy one. TVA straddled the line between private company and public agency. As a producer and distributor of power, the Authority weighed its own needs with those of the companies it sought to foster in the Valley. At the same time, the agency's public persona allowed it to defend unequal negotiations, providing a barrier (nearly unassailable in a time of national crisis) that protected it from claims of dishonest dealings. Often, the strange combination allowed TVA to navigate the rocky shoals of industrial development. At other times, conflict threatened to undermine the very prosperity TVA hoped to create. Lilienthal faced opposition from industries unhappy with TVA's rates and challenges from congressmen afraid of the Authority's wartime growth. By the mid-1940s, the agency was no longer simply a public bureaucracy. In its transformation, TVA faced new challenges that helped to define the responsibilities of the government and the public in an era of unparalleled economic growth for the Valley.

TVA had much to offer the national defense program. Nearly a decade old, the agency had an extensive network of officials within the Valley, as well as a proven record of mobilizing local action when necessary. In May 1940, Lilienthal met with Secretary of Commerce Harry Hopkins and promised that TVA could implement national defense plans across the Southeast. Hopkins suggested that the agency focus on activities within its authority, including research assistance in attracting private factories for planes, guns, and munitions; training workers for

industry; and planning for the expansion of the power supply.<sup>3</sup> His recommendations meshed perfectly with Lilienthal's own plan for the Authority's defense effort. With an extensive Valley infrastructure in place, TVA hoped to contribute more fully. Howard Menhinick, the Director of the Department of Regional Studies, provided an extensive list of the services the agency offered. In particular, Menhinick noted, the agency might avoid the "overloading of federal offices" that accompanied the defense effort by coordinating interaction between federal programs and local and state administration. Menhinick also offered to take control of regional training, transportation, housing, planning, and even stockpiling programs.<sup>4</sup> The suggestions were as broad as they were comprehensive, but they demonstrate the willingness of the Authority to assume a leadership role in regional and national defense.

Lilienthal also sought to provide a more concrete addition to the American war effort. He assured Roosevelt that he would begin making munitions at Muscle Shoals "when we get the signal" and promised that the Authority would provide additional sites and even construction assistance for more defense plants in the Valley. Government officials told Sparkman that one of the plants would certainly be converted into explosives production, and TVA soon asked for an additional appropriation of \$65 million to expand power generation facilities to meet increased demands at Muscle Shoals, ALCOA, and other defense sites.<sup>5</sup> Lilienthal turned to publicity to encourage local participation. He told residents that despite "growing pains," new industries would soon relocate to the Valley: "Growth of industry in the South ... has been inevitable. The

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<sup>3</sup> Lilienthal, *Journals, Vol. 1*, 166-8 (28 May 1940).

<sup>4</sup> Menhinick to Clapp, "Analysis of TVA Program in Relation to National Defense and Post-Emergency Adjustment," 28 April 1941, 88: "095 National Defense – Post-War," Lilienthal Correspondence, TVA Records, NARASE.

<sup>5</sup> "TVA Ready to Help Defense," *Decatur Daily*, 14 June 1940, 1; "TVA Will Get Defense Role Solon Is Told," *Decatur Daily*, 18 June 1940, 1; and "Defense Board to Ask TVA Power Be Materially Hiked," *Decatur Daily*, 20 June 1940, 1.

change has been coming gradually, and it was right that it should, but national defense needs have accelerated the pace. Now the South is ready.”<sup>6</sup> TVA gave the nation the “stamina for emergency efforts” through its numerous programs for the Valley, particularly power generation, and only an organization like the agency, providing navigation, fertilizer, electricity, and administrative cooperation could provide the workmen, machinery, and sheer industrial capacity to run the “vast industrial machine” that supported the armed forces. TVA’s electricity drove the war effort, and in powering the plants, “vindicated” congressional decisions to provide funds.<sup>7</sup>

War industries demanded a rapid increase in TVA’s electrical output. Congressmen rushed through appropriations measures that would allow TVA to expand facilities at dams and steam plants across the Valley. Some feared that demand would outstrip supply, leaving both the nation’s armed forces and local consumers without power. Hearing rumors that the nation as a whole would soon face a power shortage, Sparkman wrote to then-Chairman Harcourt Morgan, suggesting an expansion of the facilities at Muscle Shoals. General Manager Gordon Clapp tried to allay the representative’s fears. TVA engineers were studying the possibility of increased capacity, but focusing on areas where the need was greatest. Muscle Shoals was certainly a possibility, given the reactivated munitions works, but other areas needed improvement as well. Sparkman insisted, highlighting the fear among area officials that the booming defense economy would pass over the Valley for lack of electricity. At the risk of sounding “over-insistent,” he pressed Clapp for a decision, stating that in efforts to bring in the Reynolds Metals Company and to find an industry to use the other nitrate plant, power considerations could be the deciding factor. Concerned about the continued development of North Alabama, Sparkman simply

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<sup>6</sup> “Valley Future,” *Decatur Daily*, 21 June 1940, 4; and Don Whitehead, “World at War Rapidly Is Reshaping Economic Scenery in Tennessee Valley,” *Decatur Daily*, 14 August 1940, 3.

<sup>7</sup> “The Tennessee Valley Authority and National Defense,” 22 April 1941, *Congressional Record* (Appendix), 77<sup>th</sup> Cong., 1<sup>st</sup> sess., 1941, 87, pt. 11: A1832-3.

wanted to be sure that the power was available.<sup>8</sup> Sparkman, as well as many others, equated electricity with the possibility of economic development.

Perhaps the best example of TVA's participation in the national defense effort was its relationship with the Aluminum Company of America's manufacturing plant near Knoxville. In the 1930s, TVA cooperated with ALCOA to connect some of its own hydroelectric facilities to the government network, including the site of Fontana Dam in western North Carolina. The agreement allowed TVA to control electric facilities within its boundaries, and in return, ALCOA could call on the Authority to provide more power as needed. The war made this contract extremely valuable to the aluminum company. In his journal, Lilienthal noted that his agency was "carrying" ALCOA above its contractual obligations, knowing that aluminum was so valuable to the war effort that TVA could do nothing to force ALCOA to renegotiate. The situation became "uncomfortable," since some industries and communities were forced to go without power so that the company could continue increasing production.<sup>9</sup> Sparkman wrote to Lilienthal, concerned that TVA and ALCOA had entered into an "alliance" and, in the Authority's case, "the whole Defense Program has served to make the big, bigger." Both Clapp and Lilienthal responded, sending the congressman a copy of TVA's contract with ALCOA and allaying fears that the agency had become a power-manufacturing trust. Lilienthal agreed with the "unhappy" fact that some big companies and agencies were increasing in size and profit margin during the crisis, but TVA could do little about ALCOA's size, and suggested the government work to support small business.<sup>10</sup>

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<sup>8</sup> Sparkman to Morgan, 20 December 1940; Clapp to Sparkman, 3 January 1941; and Sparkman to Clapp, 6 January 1941, 52: "032.11 Sparkman, John," Pope-Paty Papers, TVA Records, NARASE.

<sup>9</sup> Lilienthal, *Journals, Vol. 1*, 315 (19 May 1941).

<sup>10</sup> Sparkman to Lilienthal, 27 August 1941; Clapp to Sparkman, 12 September 1941; and Lilienthal to Sparkman, 16 September 1941, 17: "032.1 Sparkman, John J.," Lilienthal Correspondence, TVA Records, NARASE.

In fact, because TVA's power supply was limited, groups sometimes fought to ensure that their particular area received enough power to participate in the defense movement. Sparkman's concerns about a TVA-ALCOA "alliance" largely stemmed from his fears that the Chemical Warfare Arsenal scheduled to be built in Huntsville would be unable to contract for enough power, defeating development in the area (see chapter 6). In September 1941, officials from TVA and Huntsville's municipal power system met in Knoxville to outline an agreement. Lilienthal hoped to directly provide electricity to the government facility, a seemingly simple matter of inter-office paperwork. Sparkman defended the city's right to buy and sell TVA power. Accompanied by the City of Huntsville Electric System's manager, Karl Woltersdorf, a former Alabama Power district manager, he argued that the municipal plant had been purchased from Alabama Power in order to facilitate Huntsville's growth. If TVA cut the city out of the negotiations, the action would reverse the outcome of the power fight of the 1930s. Even worse, the city plant required "heavy capital expenditures" to expand to meet demand, and only contracts with large buyers (like the arsenal) would help recapture the financial losses.<sup>11</sup> Defense mobilization was fulfilling the hopes of municipal plants across the Valley, seeing the increased industrial demand that Lilienthal and TVA had promised. Yet now, presented with the possibility of vastly increased profits, the government agency attempted to interpose itself between supplier and customer.

Events elsewhere increased Huntsville's fears. In late October 1941, the Office of Production Management called for power rationing in the Southeast to ensure sufficient electricity for defense industries. Domestic customers were implored to voluntarily reduce power usage to "ease the burden on industry, to prevent factory shutdowns, and to maintain

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<sup>11</sup> Memo, "Covering Conference Held at Knoxville, Tennessee, with Officials of T.V.A. in Connection with Service to Chemical Warfare Arsenal, Huntsville, September 8, 1941," 9: "Huntsville Projects," Sparkman House Papers, Hoole.

payrolls,” both in war industries and in other companies forced to scale back production.<sup>12</sup> At the same time, TVA was embroiled in a highly public fight to supply power to Chattanooga’s Volunteer Ordnance Works. Chattanooga’s municipal system also wanted to power its local government defense project and, as in North Alabama, TVA hoped to circumvent the city to directly provide power to a fellow government agency. As negotiations grew heated, Sparkman again wrote to Lilienthal, carefully outlining his understanding of TVA’s role in power production and distribution. He warned that the agency could not sell power for retail – the TVA Act only provided for wholesale distribution to municipal groups and rural cooperatives. In fighting Chattanooga (and by implicit comparison, Huntsville), Lilienthal was setting himself up for headaches and “embarrassing situations.”<sup>13</sup> Soon afterwards, TVA relented. In early November, Lilienthal announced TVA would withdraw its proposal to supply power to the War Department plant, though he reasserted his belief that the Authority had the right to do so. The “spirit of competition” was against TVA’s policy of cooperation with distributors, but Lilienthal insisted that direct power supply was a preferable option when dealing with government plants.<sup>14</sup> A victory for Chattanooga seemed a victory for Huntsville, and Sparkman received a promise from Lilienthal that he would not participate in a competitive bidding process for power supply to the arsenals unless specifically directed by the War Department to do so.<sup>15</sup>

The relief was short-lived. Less than three weeks later, the War Department informed Sparkman and the municipal electric system that it would contract directly with TVA for the

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<sup>12</sup> “A Message to the People of the Tennessee Valley Region,” *Huntsville Times*, 1 November 1941, 3.

<sup>13</sup> Sparkman to Lilienthal, 3 November 1941, 52: “032.11 Sparkman, John,” Pope-Paty Papers, TVA Records, NARASE.

<sup>14</sup> TVA, Press Release, 4 November 1941, in *Ibid.*

<sup>15</sup> Sparkman to Undersecretary of War, Robert P. Patterson, 2 December 1941; and Patterson to Sparkman, 20 December 1941, 9: “Madison County: Huntsville Projects, 1939-43,” Sparkman House Papers, Hoole.

lowest possible electric rate, a “Federal Department dealing directly with a Federal agency.” Woltersdorf complained that the government had “taken advantage of our friendly attitude.” The manager found himself in a difficult situation. His supplier, TVA, went around him to contract with the largest local industry. Worse, defense demands seriously limited the amount of power available to all distributors, making it nearly impossible for the city to obtain enough energy to supply the arsenal, even if it were able to challenge the decision.<sup>16</sup> In the end, Woltersdorf realized he was fighting a losing battle. The War Department requisitioned TVA power for national defense requirements and paid a “government rate” comparable to the contracts the agency held with cities and municipalities in the Valley.<sup>17</sup>

In hindsight, the fight to supply the arsenals proved overblown. With the culmination of the national crisis, municipal electric systems took over power contracts and witnessed an explosion in customers associated with the rapidly expanding facilities. Yet the disagreement provides an interesting insight into TVA’s wartime industrial growth. Arsenals, ordnance works, and associated companies demanded enormous blocks of prioritized power, returning a sure profit to any provider. Faced with the possibility of a guaranteed return, electric companies pushed to participate in mobilization, even as Lilienthal and TVA sought to use their public status to preempt their own customers. Again, TVA tried to navigate the public and private sphere, causing conflict among local groups eager to benefit from of the defense boom.

No private defense industry in North Alabama received as much attention as the Reynolds Metals Company. When the Virginia business announced its decision to locate in North Alabama in 1940, local leaders praised TVA officials and congressional leaders for their

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<sup>16</sup> Woltersdorf to Sparkman, 5 December 1941; and Woltersdorf to Sparkman, 24 December 1941, in *Ibid.*

<sup>17</sup> Lilienthal to Lister Hill, 9 December 1941, 95: “032.21 Hill, Lister, 1940-1947,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE

work in negotiating with company president Richard R. Reynolds. In particular, Senator Lister Hill formed a working relationship with the aluminum manufacturer, making daily calls and petitioning the Reconstruction Finance Corporation for loans and TVA for a favorable power contract.<sup>18</sup> T.M. Rogers, a Florence department store owner and long time proponent of Valley development, and Allen J. Roulhac of Sheffield immediately began working to convince Hill and Sparkman to help bring the facility to Sheffield. As Roulhac noted, the Valley, and Sheffield in particular, was “located in the territory served by public power, in an area which certainly needs industrial development of high order badly [and] should be a most desirable location for any kind of national defense or peace time industry.” Cheap, available electricity was a crucial determinant in the decision, making negotiations with TVA especially important. Sparkman set up meetings with Reynolds and TVA representatives, who promised to make an “equitable” contract with the company. Rogers agreed to pay all of the expenses of local leaders who helped show Reynolds officials the site at Sheffield. He saw the initial financial outlay as an investment in the district’s future: “The best thing I see about the Reynolds Metal Company is the fact that it will make available aluminum for other industries, both large and small, who would be interested in locating here due not only to cheap power but local materials.”<sup>19</sup> Both local and federal leaders cooperated in their attempt to influence the decision. Sparkman worked with TVA to formalize power contracts. When he realized that Reynolds was concerned with transportation

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<sup>18</sup> “Aluminum Plant to Be Built in North Alabama by Virginia Firm,” 2 August 1940, *Decatur Daily*, 1; and Allen J. Roulhac to Hill, 30 June 1940, 162:3, Hill Papers, Hoole.

<sup>19</sup> T.M. Rogers to Sparkman, 5 August 1940; Roulhac to Sparkman, 12 August 1940; Rogers to Sparkman, 17 August 1940; Harold T. Pounders, Secretary, to Rogers, 19 August 1940; Rogers to Sparkman, 27 August 1940; and Rogers to Sparkman, 3 September 1940, 22: “House Miscellaneous: Reynolds Aluminum,” Sparkman House Papers, Hoole.

and material availability, he contacted Rogers and Roulac, asking the businessmen to find “anyone competent” to advertise the area.<sup>20</sup>

Government representatives remained outwardly impartial, assuring inquiring groups that they would work equally for every community able to accommodate the plant, but by late summer, Sheffield had become the clear front-runner. In fact, the only major obstacle to immediate construction was TVA’s electric rate. Reynolds wanted the same rate as the other Valley aluminum factory, ALCOA. J.A. Krug, the Authority’s Chief Power Engineer, promised to match ALCOA’s rate for secondary power (electricity produced during times of low water), but only gave the standard industrial rate for primary power (produced directly from normal or high water running through the dam) with a 10% discount if the plant connected directly to a TVA dam. Krug promised to supply power as soon as possible, but Hill was still discontented with the agency’s efforts: “I cannot but feel that if Dr. [Harcourt] Morgan and Mr. Lilienthal had evidenced proper interest in the matter, the aluminum plant would now be under construction in the Tennessee Valley area.”<sup>21</sup> The negotiations proved a rocky beginning to the relationship between Reynolds and TVA, and later exploded into a war of words in which Hill and Sparkman found themselves uneasy peacekeepers.

Nevertheless, in mid-September, Sparkman’s secretary informed Rogers and Roulhac that a tentative contract had been signed to locate the plant at Sheffield, pending Defense Commission approval. On October 7, the news became public. Reynolds Metal Company began construction on a facility just two miles from Wilson Dam, near the Electro-Metallurgical factory. Within six months, Reynolds promised to employ 1,250 men working to produce

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<sup>20</sup> Sparkman to Rogers, 2 September 1940, in *Ibid.*

<sup>21</sup> Krug to Hill, 24 August 1940; Krug to Reynolds, 30 August 1940; and Hill to Krug, 11 September 1940, 162:7, Hill Papers, Hoole.

aluminum for the American Army Air Corps. The factory replaced “fields of lespedeza, turnips, potatoes and cotton,” consumed \$1,000,000 in TVA power, and, except for “key men,” employed all local labor.<sup>22</sup> An economic victory for the Tri-Cities, the Reynolds Metal Company was also a symbolic change for the region, literally built on the fields of cotton that once dominated the Valley. The defense boom remade North Alabama, though as Reynolds’s experience demonstrated, that transition was not always easy.

Almost as soon as the Reynolds plant was completed in the summer of 1941, the company began planning to expand. After initial inquiries into sites around the Valley, the company decided to add to its existing property near Sheffield in the aptly named town of Listerhill. With nearly \$13,000,000 in loans from the RFC, company officials expected to drastically increase the plant’s output, indicative of the wartime demand for domestically produced aluminum.<sup>23</sup> Yet despite the importance attached to their work in the Valley, Reynolds officials felt slighted. TVA’s relationship with ALCOA irked the company’s leaders, who believed that the Authority favored the Tennessee plant with lower costs, government assistance, and an unfounded priority for their product.

In early 1942, TVA demanded a revenue guarantee from the plant as “minimum protection to the Government’s interests for the benefit of Reynolds Metals Company.” G.O. Wessenauer, TVA’s acting Manager of Power, felt that such a guarantee was an essential part of any contract between the government and a private consumer seeking to operate at a profit, especially with the massive investment recently placed in the expansion of the Listerhill

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<sup>22</sup> Pounders to Rogers, 20 September 1940, 22: “House Miscellaneous: Reynolds Aluminum,” Sparkman House Papers, Hoole; “Valley Gets Huge Plant,” *Decatur Daily*, 7 October 1940, 1; and “Aluminum Plant Is Expected to Be Completed Within Next Six Months,” *Decatur Daily*, 17 October 1940, 1.

<sup>23</sup> John M. Nelson, Secretary, Decatur Chamber of Commerce, 17 September 1941; and Sparkman to Nelson, 2 October 1941, 11: “Morgan County: Decatur Projects, 1940-1,” Sparkman House Papers, Hoole; Pounders to Barrett Shelton, September 1941, 12: “Morgan County: Reynolds Metals Company, 1941,” Sparkman House Papers, Hoole.

facilities. Reynolds officials called the request a violation of regular business practices, particularly while the company operated under the provisions placed on it by the RFC as it paid back its loan – in the minds of its operators, Reynolds was a “government plant.” When TVA suggested the RFC make that title official by taking full responsibility for the facilities, the company’s representatives became “exercised” and demanded to be included in all discussions between TVA and RFC concerning Reynolds. In fact, the aluminum company had already begun buying equipment and gearing for increased production. Without a sure contract for power, its work to expand would be a wasted investment and a costly mistake.<sup>24</sup>

For TVA Director James Pope, negotiations with Reynolds were “unsavory” and gave him a “feeling of nausea.” The Board had to be sure that “the interests of TVA, i.e. the Government, are protected.” Aluminum was essential to the defense of the nation, but to prefer a company’s production at the expense of the government’s fiscal integrity was a grievous mistake.<sup>25</sup> A few weeks later, tempers cooled to the point that Lilienthal and Reynolds found an “acceptable” solution by which TVA would power the plants, though neither side felt particularly happy about the agreement. Lilienthal told the Board that, having protested the actions of the company’s executives, he would let the matter stand, especially considering the nature of the wartime emergency. The agency could not be seen as preventing the production of aluminum, especially when the RFC had begun funding the plant’s expansion.<sup>26</sup> Reynolds had its contract, but the larger conflict was far from settled.

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<sup>24</sup> Wessenauer and Solicitor J.C. Swidler to Clapp, 10 February 1942, 234: “951.3113 Reynolds Metals Co. 1943-1945,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>25</sup> Pope to Lilienthal, Harcourt Morgan, and Clapp, 20 February 1942, in *Ibid.*

<sup>26</sup> Lilienthal to Board, 10 March 1942, in *Ibid.*

With Reynolds moving into full production, Senator Hill praised the company's efforts. He recalled meeting with Richard Reynolds in 1940 while the Virginian prepared to choose a site for his southern plant. Reynolds told Hill that the coming war would be fought in the air, with light metals playing an important role in victory or defeat. Hill praised the businessman's foresight, citing a May 1941 letter in which Reynolds asked the Office of Production Management to increase aluminum production through subsidies to manufacturers (Hill failed to specify how much Reynolds and Alabama benefited from such a decision). While American factories were "lulled to sleep," Reynolds had acted without orders, payment, or even government protection to mortgage his existing factories to supply aluminum for the war effort.<sup>27</sup> The company received similar praise from the Alabama State Chamber of Commerce. Reynolds had begun a "new era" with its Listerhill plant, building 6,000 bombers a year. The chamber echoed Hill in its estimation of the company's self-sacrifice in taking on the "hazardous business."<sup>28</sup> The high praise of both Hill and the Alabama chamber differed markedly from the reputation that Reynolds held among TVA's officials. While Hill applauded the company's self-sacrifice, Lilienthal and the Board noted the potential for naked profiteering and double-dealing. Reynolds had attempted to take advantage of the agency's generosity in demanding special treatment due to its essential participation in a national emergency. TVA wanted to treat Reynolds as it would any other private business operating in the Valley. The aluminum manufacturer consistently maintained that it was something more.

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<sup>27</sup> Clipping, Hill, "The Reynolds Metals Co.," in *Congressional Record*, 77<sup>th</sup> Cong., 2<sup>nd</sup> sess., 18 May 1942, in Robert E. "Bob" Jones Papers, M. Louis Salmon Library and Special Collections, University of Alabama, Huntsville (Bob Jones Papers).

<sup>28</sup> "Bombers from Reynolds Aluminum Blast the Axis," in *Alabama: Today and Tomorrow* 5:8 (July 1942), 7, 37: "092, Alabama, State of," Lilienthal Correspondence Files, TVA Records, NARASE.

Months after coming to an agreement, TVA and Reynolds were again at each other's throats. Marion Caskie, the company's vice president, vented to the Alabama congressional delegation. Caskie and Reynolds begrudgingly accepted higher rates than ALCOA, hoping to "fix" the discrepancy in later negotiations. Reynolds had become impatient, however, and announced he would give TVA time to "correct [the] discrimination" before taking other actions. Caskie sent Sparkman a pamphlet entitled "The Facts," giving his company's list of grievances. For the same amount of power, ALCOA paid \$720,000 while Reynolds paid \$846,936 – over the course of a standard 20-year contract, the Alabama company would lose \$2,500,000. Even though the contracts had been signed at different times and under different circumstances, the nature of TVA's "yardstick" dictated that a rate for Tennessee industry should match that of industry anywhere in the Valley. "The Facts" concluded, "TVA is charging Reynolds Metals Company a substantially higher rate for power than the rate granted the Aluminum Company of America although both are in the same business, both use power for the same purpose, both receive the same service, both are served by the same agency, [and] both are in the same territory." Despite its public service responsibilities, TVA was guilty of "direct discrimination."<sup>29</sup>

Lilienthal argued that Caskie's company understood the terms of their contract when they signed. Reynolds selected their Listerhill location due to TVA power and even acquiesced to a price that was higher than the one TVA gave ALCOA. Furthermore, the rate was "fair, judged by any ordinary business standards" and as Lilienthal warned, "could not be reduced without seriously affecting the Authority's financial position." The chairman accused the company of taking advantage of government goodwill for the sake of profits. ALCOA's rate came at a time

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<sup>29</sup> Caskie to Hill, 12 June 1942, 130:340, Hill Papers, Hoole; and Caskie to Sparkman, 30 June 1942," and "The Facts," 22: "House Miscellaneous: Reynolds Metals," Sparkman House Papers, Hoole.

when TVA was trying to “foster an industrial market,” implying that the “yardstick” set by TVA and Reynolds would ensure a higher profit margin than that of ALCOA’s “yardstick.” Caskie saw the situation rather differently. Reynolds had located in the region at the request of “influential Alabamians” – the same people who had to convince TVA to give the company a favorable rate. When the government agency quoted its initial offer, Reynolds considered a number of alternatives, including building its own power plant, but in the end, chose to locate at Listerhill “in spite of the fact that . . . the power contract offered by your Authority was most unjust.”<sup>30</sup>

The two groups were again at an impasse. Reynolds refused to accept any rate that differed from that of its competitor, despite the fact that the contract in question was over five years old. Caskie and Reynolds believed that in offering different rates to similar companies, TVA preferred one over the other. Hill and Sparkman worked with the aluminum company to negotiate for lower rates, but Lilienthal refused to budge. The conflict with Reynolds continued throughout the war. In October 1945, two months after the Japanese surrender, Reynolds informed Hill that he had closed over half of the company’s facilities at Listerhill, and would contemplate a complete shut-down, since he could no longer compete with ALCOA’s lower power costs.<sup>31</sup> The aluminum company eventually reached an agreement with TVA, and thus remained an integral part of the Valley economy for several decades. However, the wartime rate conflict demonstrated the increasingly untenable position Lilienthal’s TVA had come to occupy between private and public agency. Lilienthal believed that his rate structure could be adjusted to match need and demand. When the Authority wanted to encourage an industrial market, it offered lower rates, but in a time of national defense, when electricity demand increased

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<sup>30</sup> Lilienthal to Caskie, 15 August 1942; and Caskie to Lilienthal, 1 September 1942, 130:341, Hill Papers, Hoole.

<sup>31</sup> Reynolds to Hill, 9 October 1945, in *Ibid.*

dramatically, higher rates provided a larger return and a greater precedent for future growth. In calling for equality, Caskie and Reynolds repeatedly referred to TVA's "yardstick"; they believed that the guideline implied uniform rate structures for similar entities. The company wanted TVA to act as an impartial government agency. Again, the chairman occupied a gray area, and he obviously felt comfortable arguing from either position.

The private sector was not the only source of discontent over the rapid growth and indefinite nature of TVA's wartime operations. In particular, Tennessee Senator Kenneth McKellar became an outspoken opponent of Lilienthal's leadership. Representing a number of Valley counties, McKellar was an unlikely source of criticism for the Authority. In fact, he had worked closely with Senator George Norris in the 1920s after the future "Father of TVA" agreed to include fertilizer production in his government operation plans for Muscle Shoals. McKellar introduced amendments ensuring that TVA power would be sold to municipalities and cooperatives, and after Roosevelt's election, he claimed to be "perfectly delighted" with the prospect of the government's development of the Tennessee River watershed.<sup>32</sup> McKellar believed that only the federal government could adequately oversee such a massive undertaking and ensure that the benefits went to Valley residents in need of assistance. Yet by 1940, McKellar had watched as the Authority's primary mandate fell by the wayside. In opposing TVA's wartime activities, the senator earned the wrath of many of his southern colleagues, but he also provided an important counterpoint to Lilienthal's own vision for the Valley.

McKellar argued that the Authority had exceeded its original intent, citing numerous examples of its misuse of funds, lack of oversight, and policies injurious to farmers. In particular, McKellar questioned the continued flooding of farm land in east Tennessee, which

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<sup>32</sup> Qtd. in Hubbard, *Origins of the TVA*, 314. Hubbard's study of the Congressional debate over the Muscle Shoals provides a more in-depth look at the complicated nature of McKellar's support.

seemed antithetical to TVA's mission to assist in the rehabilitation of southern agriculture. When he attempted to block the continued construction of Douglas Dam above Knoxville, needed to power the Valley's growing economy, he found that his sentiments were not shared by his fellow congressmen. With war industries placing an enormous drain on Valley power reserves, dam construction was necessary to keep soldiers armed and planes in the air. As the *Huntsville Times* noted, his "inopportune" actions "would strike vitally at [TVA's] program, and upset a major portion of the nation's war effort."<sup>33</sup> McKellar also balked at the Authority's spending practices and introduced a bill that allowed Congress to closely oversee the funds appropriated to TVA. He called Lilienthal and Krug the "gold-dust twins" of the agency, citing thousands of automobiles, travel pay for Lilienthal to publicize TVA's actions (and oppose McKellar's criticisms), and several unnecessary projects – the chairman's "carte blanche" had to be checked.<sup>34</sup>

McKellar's former allies denounced his "interference" with the war effort. Norris listed the benefits "endangered" by McKellar's criticism: 470,000 customers, 5,000 miles of transmission lines, 19 generating plants, and essential defense businesses across the Valley. The Nebraskan promised that such oversight would make TVA unable to fulfill its role in producing power, forcing the agency to "turn in its receipts" and killing its flexibility.<sup>35</sup> According to his journal, Lilienthal welcomed the attacks, even the personal affronts to his decency, as "a perfect demonstration of the difference between predatory politics and baseness in public life, and the thing that TVA stood for." McKellar's critique proved what the chairman felt all along – working solely within the government would only hamper TVA's larger vision for the Valley.

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<sup>33</sup> "McKellar and TVA," *Huntsville Times*, 17 April 1942, 4.

<sup>34</sup> *Congressional Record* (Senate), 77<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1942, 88, pt. 3: 3877-79.

<sup>35</sup> *Congressional Record* (Senate), 77<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1942, 88, pt. 3: 3895-6.

Locals supported the Authority's relative independence from government oversight. Lilienthal specifically cited Decatur's leadership, including Barrett Shelton, who showed that TVA's actions influenced Valley residents to call for development on their own.<sup>36</sup>

The House of Representatives defeated the McKellar Amendment in June, but the senator continued his "unremitting and unrelenting ... attacks on the TVA." In early 1943, he introduced legislation making federal employees who earned over \$4,500 per year subject to congressional approval. The Valley worried that the amendment would "give him a throttle hold upon TVA personnel and technicians."<sup>37</sup> Barrett Shelton asked Governor Chauncey Sparks to contact Senator John H. Bankhead, Jr., in an attempt to fight on behalf of TVA's program for "the farming people of the state." Lister Hill told a concerned group of city commissioners from Muscle Shoals that he was doing everything in his power to defeat McKellar. The Huntsville Chamber of Commerce instituted a letter-writing campaign to induce congressmen across the country to kill the legislation.<sup>38</sup> For the Valley, the opposition was more than a power play by McKellar. By endangering the Authority's independence, the senator was striking at an economic lifeline connecting the people to the prosperity of the defense boom. Not only did Lilienthal and his agency provide dams, plants, factories, fertilizer, and electricity to the Valley, but as Hill noted, TVA buttressed the people's confidence, convincing them that their own actions could make a difference in the local economy.<sup>39</sup> Without the freedom to hire consultants and other workers to communicate with community leaders and local groups and without the

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<sup>36</sup> Lilienthal, *Journals*, Vol. 1, 487 (5 May 1942).

<sup>37</sup> "House Defeats TVA Amendment," 9 June 1942, *Huntsville Times*, 1; "McKellar and the TVA," 24 February 1943, *Huntsville Times*, 2.

<sup>38</sup> Shelton to Sparks, 24 February 1943, SG12412: 8, Chauncey Sparks Administration Papers, ADAH; Hill to Muscle Shoals City Commissioners, 26 February 1943, 270:2, Hill Papers, Hoole; and "An Important Message," 28 February 1943, *Huntsville Times*, 3.

<sup>39</sup> "TVA Record Cited by Senator Hill," *Huntsville Times*, 4 March 1943, 2.

discretion to direct funds to needed projects, TVA would be relegated to a very limited governmental role supplying power to whichever entity McKellar and Congress deemed worthy.

McKellar won his fight in the Senate Judiciary Committee, having TVA's top-ranking employees included on a list of federal jobholders to be confirmed by the Senate, but he faced immediate opposition from Hill and Bankhead, who began trying to substitute an exemption for TVA in the Tennessean's legislation. Hill specifically defended the Authority's flexibility: "We were setting up something new and different; we were setting up a corporation but which would operate in a field and in a manner much similar to a private corporation. It was necessary to give to this corporation a flexibility and an initiative such as that enjoyed largely by private corporations." Only 400 of TVA's 33,000 workers were affected by McKellar's legislation, but those chemists, engineers, agronomists, and administrators defined the agency's policies.<sup>40</sup> Hill praised the "grass roots" nature of TVA, a "great Federal agency ... which points the way, and shows the road away from bureaucracy and bureaucrats."<sup>41</sup>

McKellar was increasingly isolated. His entire congressional delegation supported TVA, and even though the senator had supported the development of the Tennessee Valley "when Lilienthal was a boy in school," he felt beset on all sides by opposition. Lilienthal and other TVA representatives made speeches across Tennessee, creating counter-publicity. Funded by congressional appropriations, Lilienthal's tour was a "political club" to beat McKellar in his own state.<sup>42</sup> The senator called the chairman "oily, eely, designing, [and] corrupt" and criticized his increased power in the agency: "He is just as much in control of that Board, and everything that

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<sup>40</sup> *Congressional Record* (Senate), 78<sup>th</sup> Cong., 1<sup>st</sup> sess. 1943, 89, pt. 4: 5798-800.

<sup>41</sup> *Ibid.*, 5803-4.

<sup>42</sup> "Double-Barreled Fire Laid on TVA," 9 March 1944, *Huntsville Times*, 3; "McKellar Fights Alone," *Huntsville Times*, 15 March 1944, 4; and *Congressional Record* (Senate), 78<sup>th</sup> Cong., 1<sup>st</sup> sess., 1943, 89, pt. 4: 5801.

pertains to the TVA, the dams, and the funds, as Hitler is in control of Germany.”<sup>43</sup> McKellar’s palpable animosity towards Lilienthal stemmed from his sense that Lilienthal had pushed TVA in a new and very different direction from the vision of Roosevelt and Norris. Instead of preserving farmland or submitting to the congressmen that funded him, Lilienthal had taken on the obligation to power a new, industrial South, using the war as a springboard to the region’s economic revitalization.

In June 1944, McKellar’s amendments were removed from the TVA appropriation bill in committee, but the senator’s opposition did not end there. In March 1945, he would again try to tighten federal oversight of the agency, but his wartime campaign proved that he simply could not overcome the massive public support for the Authority in local communities and in the halls of Congress.<sup>44</sup> McKellar’s fight highlighted just how far Lilienthal had moved away from the idealism of TVA’s origins during the Great Depression and early New Deal. Hill and other proponents consistently claimed that the “flexibility” of a private corporation had been a founding tenet of the TVA Act, and that the ability to sell wholesale power and determine rates gave the Authority the kind of economic control that any manufacturer of a needed commodity enjoyed. Yet Morgan and Roosevelt envisioned an agency with the ability to draw on the authority and sheer resources of the government to remake the physical and social landscape of the Valley. The government took charge in relocating farmers, building dams, controlling malaria, conducting employment training, running demonstration farms, and overseeing experimental fertilizer programs – the generation of power for industrial uses was not a priority. Lilienthal began to reverse that process, and the defense mobilization of the American and

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<sup>43</sup> *Congressional Record* (Senate), 78<sup>th</sup> Cong., 2<sup>nd</sup> sess., 1944, 90, pt. 3: 2884-86.

<sup>44</sup> “McKellar Threat to TVA Is Beaten,” 15 June 1944, *Huntsville Times*, 2; and “McKellar to Ask TVA Fund Change,” 11 March 1945, *Huntsville Times*, 2.

southern economy allowed him to flex the Authority's industrial muscle with the cooperation of the Valley residents he sought to aid. Communities across the South used TVA's assistance to market low electric rates, available labor, and ample resources to defense industries. As Hill noted, the agency was created "for the people." How those people chose to utilize their gift would be an important force in the redirection of the Authority's program.

From its inception, TVA had been termed a "grass-roots" organization, a government agency that sought the input of the people it was directed to help. Arthur Morgan and David Lilienthal both stressed the role of people in their goals for the Valley. Yet where Morgan sought to create the perfect citizen, combining the rural life of small farms with the income and employment benefits of small businesses, Lilienthal sought to empower Valley residents as consumers, boosting income through industries recruited to the area to take advantage of TVA's cheap available power. Under Morgan, TVA centered on locals recruited into temporary relief work and trained in better farming practices. Lilienthal's agency still targeted unsuccessful farmers, but he transferred attention from TVA's agronomists and social workers to its economists and planners. He organized meetings with local and state leaders, instructing them in methods of industrial recruitment, inter-organizational cooperation, and infrastructure development. The Authority's new focus convinced many communities to create civic improvement associations, and Valley cities with existing chambers of commerce and development groups found in TVA willing partner in progress. Even as Lilienthal moved the agency in a new direction, local development groups convinced him to go further with pleas for assistance and examples of startling success.

TVA's new local initiative came just as Alabama began its own state-organized industrial development program. The state legislature created the Alabama State Planning Commission in 1935, but limited its actions until 1939, when the commission gained the ability to advertise state resources to nonresidents.<sup>45</sup> In 1937, Alabama Power's Thomas Martin founded the Alabama State Chamber of Commerce, hoping to organize statewide efforts at attracting and retaining business.<sup>46</sup> Frank Dixon, elected governor in 1938, proved more receptive to development than his predecessors. He traveled to New York, speaking to an investment club on the need for industrialization to supplement the southern agricultural economy, calling the continued reliance on extractive industries a "mistaken policy."<sup>47</sup> Dixon and the State Planning Commission tentatively began organizing to sell the state to interested industries across the country. The commission studied the drainage basin around Mobile, conducted detailed investigations into the state's park, recreation, and forestry resources, and released a report on the housing and population problems created in war industry communities.<sup>48</sup>

In 1943, the commission became the Alabama State Planning Board, but its mission remained the same: working with communities to prepare for development, conducting large regional improvement projects, overseeing statewide public works, and ensuring that wartime industry transferred seamlessly into peacetime pursuits.<sup>49</sup> The businessmen of the state did not awaken overnight. The Florence Chamber of Commerce had been active since World War I,

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<sup>45</sup> "Alabama Planning and Local Planning in Six North Alabama Towns, Part I, Alabama Planning," [1940s], 10-1, 38: "092, Alabama (A-Z)," Lilienthal Correspondence, TVA Records, NARASE.

<sup>46</sup> Rogers et al., *Alabama*, 471.

<sup>47</sup> "Dixon Pleads South's Case in New York," *Decatur Daily*, 20 November 1940, 1, 2.

<sup>48</sup> Alabama State Planning Commission Annual Report, "Alabama Planning," 14 December 1942, 1, 1: "095 Alabama A-Z," Pope-Paty Papers, TVA Records, NARASE.

<sup>49</sup> W.O. Dobbins to Governor Chauncey Sparks, 14 July 1943, SG12411:3(B), Sparks Administration Papers, ADAH.

seeking industries to offset the stalemate over the proposed government facility at Muscle Shoals. Decatur initiated its own program in response to the opportunities presented the entrance of TVA. North Alabama was truly ahead of the state in its embrace of economic development activities. Yet the 1940s saw an expansion of local activities just as a new statewide enterprise sought to streamline the state's progress. The defense boom helped, but TVA's work with these local and state agencies provided an impetus to grow and coordinate that transformed a motley collection of local groups into a statewide network of developers.

Early in its existence, the Alabama State Planning Board fostered a relationship with TVA to help meet the demands of the Alabama counties located within the borders of the Authority. Beginning in 1940, TVA set up a cooperative exchange with the state organization, providing its vast regional research mechanism in the hopes that the ASPB could more closely oversee and manage the local community development groups that put its plans into action.<sup>50</sup> In 1943, the cooperation became even more formalized when the two signed a seven-year contract. TVA provided a full-time planning technician to the state agency and reimbursed all expenses.<sup>51</sup>

Lilienthal praised the "excellent" work of the ASPB, particularly in Guntersville where the transition from agriculture to industry and recreation "presented a host of new problems and new opportunities requiring energetic and farsighted local action." The ASPB worked with the city to create a zoning ordinance, municipal park, boat harbor, and studies for future growth. In Muscle Shoals, the state board designed a public housing program to help meet demand on TVA and defense projects. With the help of the ASPB, the Authority gained valuable assistance with

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<sup>50</sup> "Alabama Planning and Local Planning in Six North Alabama Towns, Part I, Alabama Planning," [1940s], 12, 38: "092, Alabama (A-Z)," Lilienthal Correspondence, TVA Records, NARASE.

<sup>51</sup> Menhinick to Clapp, 9 September 1943, 110: "092 Alabama, Folder 1," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

the “serious community development problems associated with the current intensive national-defense expansions.”<sup>52</sup>

TVA wanted to foster local leadership in industrial recruitment and economic planning, so in its relationship with the ASPB, the agency insisted on a “grass-roots” approach that would similarly encouraged local initiative. The two groups cooperated with Florence’s city planning commission to create a detailed map of the city, including new subdivisions built during the defense boom. In Sheffield, the groups helped the city formalize its building code and conduct studies for a sewer system.<sup>53</sup> In 1944, at the request of Governor Sparks, TVA’s Director of the Department of Regional Studies, Howard K. Menhinick, drafted a formal program of operation for the ASPB, hoping to guide the state board into the postwar years. At the heart of the Authority’s instructions was a provision to stimulate local planning. Only at the community level did private development interact with the state and federal programs seeking to create economic opportunities. Thus, the ASPB would need to guide local agencies just as TVA guided the ASPB, creating multi-county cooperation and cataloging regional resources.<sup>54</sup> Menhinick stressed the larger picture: “When many people are thinking and working on the same problems and all are pulling together in the same direction, there is created a wealth of manpower, ingenuity, and ideas which could never be supplied by a limited number of federal or state personnel.”<sup>55</sup> TVA hoped to create a system of oversight and instruction that would streamline

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<sup>52</sup> Lilienthal to Dixon, 25 September 1941, 110: “092 Alabama, A-Z,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>53</sup> Alabama State Planning Board, “Progress Report on Local Planning in North Alabama, July 1, 1942-June 30, 1943,” August 1943, 1, 3-9, in *Ibid.*

<sup>54</sup> Menhinick, “A Suggested Program for the Alabama State Planning Board: A Statement Prepared at the Request of the Governor of Alabama,” 10 August 1944, 1-3, 59: “092 Alabama A-Z,” Pope-Paty Papers, TVA Records, NARASE.

<sup>55</sup> *Ibid.*, 9.

industrial recruitment. Communities would cooperate with each other instead of undercutting bids or stealing prospects. Lilienthal stressed that economic revitalization would only come when communities used their inherent resources to bring in industries, increasing the purchasing power of Valley residents and pumping money into the area that could be used for needed improvements. Working with state agencies like the Alabama State Planning Board, the chairman was able to implement that plan in a carefully organized manner.

The Authority took time to foster relationships with state agencies, but it also worked directly on the local level to encourage economic development, both with civic organizations and with individual businesses looking to relocate or expand operations. TVA's relationship with companies such as Reynolds was characterized by tense negotiations and competing motivations, but cooperation with civic organizations occurred with relatively little disagreement. Across the Valley, civic agencies fully embraced Lilienthal's program of industrial development. Decatur, in particular, continued its cooperation with the agency, finding its new leadership more acquiescent in plans for industrial recruitment. Led by the editor of the *Decatur Daily*, Barrett Shelton, and the Decatur Chamber of Commerce, the city and its wartime economic growth spurred Lilienthal's transformation of TVA's program, even as that program encouraged the Valley to rely on industry to create economic opportunity.

At the end of 1940, the *Decatur Daily* announced that its city was ready to "go to town" after a "decade" of preparations. With the assistance of TVA, the paper promised, Decatur would finally become a "real city" of 50,000 people by building its farm markets, diversifying its industry, and drawing on its advantages in raw material, labor, low taxes, cheap electricity, and transportation.<sup>56</sup> The plea for city progress was not new to Decatur. In fact, Shelton, had been campaigning for economic development since his first contact with the Authority in the mid-

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<sup>56</sup> "Chart for 1941," *Decatur Daily*, 30 December 1940, 4.

1930s. Yet by 1940, the combination of the defense effort and Lilienthal's leadership opened new possibilities, and Shelton and his fellow leaders quickly moved to take advantage. The year before, Shelton reminded Senator Hill of his city's needs, claiming that Decatur "[had] these things coming to us" and calling for defense plants that would "[belong] to the Tennessee Valley section of Alabama." Hill reassured the editor that he was focused on that very goal.<sup>57</sup>

In May 1940, Shelton contacted Harcourt Morgan in an attempt to convince him to bring wartime industry to his city. He asked Morgan to meet with him and Alabama State Chamber of Commerce President Benjamin Russell in the hopes that TVA would give North Alabama, which was "in a most uncomfortable industrial position," information on industrial relocation requests received by the state agency.<sup>58</sup> General Manager Clapp attempted to remain impartial, agreeing that many communities like Decatur would want to take advantage of TVA's program, but that the Authority had to remain "regional." Clapp cited many of his agency's accomplishments, such as navigation, flood control, and electricity, but instructed the editor that these would only benefit Decatur and the rest of the Valley if he and his colleagues chose to "work toward their full utilization." Clapp promised to send a representative to help the city attract new industries, and recommended that Shelton pursue development based on "the application of local initiative and ingenuity toward the creation of new wealth and new income through entirely new enterprises."<sup>59</sup> The sentiment exhibited a real understanding of the needs of the southern economy, but failed to match either Lilienthal's economic policy or the wishes of Decatur's

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<sup>57</sup> Shelton to Hill, 20 September 1939; and Hill to Shelton, 23 September 1939, 162:9, Hill Papers, Hoole.

<sup>58</sup> Shelton to Morgan, 13 May 1940, and Shelton to Morgan, 18 May 1940, 33: "095 Shelton, Barrett," Pope-Paty Papers, TVA Records, NARASE.

<sup>59</sup> Clapp to Shelton, 22 May 1940, in *Ibid.*

leadership. Both hoped to direct industries to the Valley, and both saw recruitment as a valuable, even essential aspect of any plan for economic development.

Such active leadership made Decatur the ideal example of Lilienthal's plans for the Valley. After a trip through North Alabama, Lilienthal called the city a "grand experiment." Just four years earlier, Decatur was "in admittedly bad shape," looking for industry to revitalize the area economy. Yet as Lilienthal noted, "Instead of crying about the ruin which was coming because much of the farming land was flooded by Wheeler Dam, they used their heads." Shelton, in particular, had the "brains and spirit" to realize that the newly navigable river would bring in industry.<sup>60</sup> The month before Lilienthal's journal entry, the Nebraska Consolidated Mills announced the construction of an 800 barrel-per-day flour processing plant, employing 75 workers.<sup>61</sup> In 1941, in cooperation with TVA, the city won the Southern Aviation Training School on land just north of the city across the Tennessee River. Decatur Chamber of Commerce President John M. Nelson hoped that the school would be the foundation for even further defense investment.<sup>62</sup>

Industrial attraction, however important, was not enough, as events soon proved. New facilities and the expansion of existing industries forced leaders to consider the quality of economic growth. Shelton regularly editorialized on the subject. He quoted a McComb County, Mississippi, newspaper on the growth of "boom towns" marked by economic speculation, immorality, and crowded conditions. Only Decatur's "slow and methodical" growth would save it from a similar fate. He praised the confidence of local workers, who not only wanted money,

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<sup>60</sup> Lilienthal, *Journals*, Vol. 1, 215 (15 September 1940).

<sup>61</sup> "Nebraska Consolidated Mills to Put Big Flour Plant Here," *Decatur Daily*, 28 August 1940, 1.

<sup>62</sup> Nelson to Sparkman, 9 July 1941, 11: "Morgan County: Decatur Projects, 1940-1," Sparkman House Papers, Hoole. In fact, the land would become a small airstrip, Pryor Field, and Calhoun Community College.

but also a better city, and worked towards that goal.<sup>63</sup> Decatur launched an \$820,000 public improvement program to build four new school buildings, pave twelve city blocks, and locate a new marine park on an island in the Tennessee River.<sup>64</sup> In 1941, the city organized an official planning commission, designed to cooperate with both TVA and the various federal war agencies directing defense funds across the country. The commission prepared zoning ordinances and looked into the use of the Tennessee River waterfront, including land purchased by TVA during the planning of the reservoir.<sup>65</sup> Ingalls Shipbuilding expanded onto adjacent TVA property, but with rising employment came increased population and a strain on the city's outdated sewer system. In conjunction with the Public Housing Authority, the commission worked to get utilities to a 30-unit housing project.<sup>66</sup>

In 1943, Shelton proudly boasted of his city's growth. On the occasion of TVA's tenth anniversary, he quoted an unnamed Decatur businessman who recently met with Lilienthal. He told the chairman, "We are building a city here, not necessarily a bigger city, but a better city, a city that will live, that will not blow down in the face of ill economic winds."<sup>67</sup> The story may have been apocryphal, but its sentiments undoubtedly pleased the chairman. Shelton understood the necessities of economic growth. He looked to TVA for assistance, but also guided local leaders, whose self-initiative brought new industries to the city while preparing its infrastructure for further expansion. Following its rapid wartime growth, the city's postwar future would

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<sup>63</sup> "Boom Towns," *Decatur Daily*, 2 December 1940, 4; and "Building Facts," *Decatur Daily*, 30 September 1940, 4.

<sup>64</sup> "Triple City-Building Plan Begun," *Decatur Daily*, 8 August 1940, 1.

<sup>65</sup> Alabama State Planning Commission, Annual Report, "Alabama Planning," 14 December 1942, 2, 1: "095 Alabama A-Z," Pope-Paty Papers, TVA Records, NARASE.

<sup>66</sup> Alabama State Planning Board, "Progress Report on Local Planning in North Alabama, July 1, 1942 – June 30, 1943," August 1943, 17-21, 110: "092 Alabama, A-Z," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>67</sup> "Ten Year Appraisal," *Decatur Daily*, 18 May 1943, reprinted in *Congressional Record* (Appendix), 78<sup>th</sup> Cong., 1<sup>st</sup> sess., 1943, 89, pt. 10: A2619.

largely prove anti-climactic, especially as nearby Huntsville eclipsed it in size and economic strength. Yet the relationship between the federal agency and Decatur's local leadership exhibited the remarkable transformation in TVA's vision for the Valley.

Close cooperation with local community leaders was an essential part of TVA's postwar plans as well. In August 1943, the University of Alabama's Dr. Raymond Paty, who would eventually be named to the TVA Board, foresaw a "violent, perhaps swift transition" to peacetime economics when the war ended, a process that could only be alleviated by immediate planning in cooperation with local businesses and communities.<sup>68</sup> One of the main concerns for the Authority was the disposition of the numerous Valley war plants that would undoubtedly scale back production and employment as peace neared. TVA's cheap electricity brought numerous arsenals, camps, and storage facilities to the Tennessee Valley, and in 1944, Commerce Department chief John Ferris worked with government officials to bring local groups into the discussion on the utilization of surplus plants. In an address to the Huntsville Rotary Club, Chairman Lilienthal noted, "The postwar conversion of government-owned facilities is not simply and exclusively a question between industry and the bureau or agency of government that is disposing of that property. The community in which that facility exists, in my opinion, has a direct and immediate right to be considered in the matter of that disposition."<sup>69</sup> Leaders like Barrett Shelton had become an integral part of the Valley's economic future, helping to prepare their communities for the future.

As the nation readied for life after the war, the Authority incorporated its relationship with local and state groups into its everyday activities. In February 1945, Commerce Department Director Ferris produced a report on TVA's work with community development

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<sup>68</sup> "Post-War Planning," *Huntsville Times*, 3 August 1943, 4.

<sup>69</sup> "Lilienthal Views on Reconversion," *Huntsville Times*, 12 September 1944, 4.

groups in an attempt to “clarify” the relationship, a sure sign that the agency planned to continue the cooperation into the foreseeable future. While the report referred to the work with the groups as “developmental in nature,” it also noted that developers played an increasingly important role in helping to effect an “orderly transition from a predominately raw materials economy to more diversified forms and higher levels of economic activity.”<sup>70</sup> Again, TVA stressed the need for local initiative, encouraging businessmen to make the crucial decisions to start and expand businesses. With such varied communities (each with different actors and problems), TVA could not rely on one specific program or plan. Instead, Ferris’s department recommended a special staff committee with the sole responsibility of studying local resources, fostering cooperation between area groups, determining “realistic” investments and returns, and serving as an impartial jury to solve “technical bottlenecks” to development.<sup>71</sup> TVA leaders foresaw a future in which the communities of the Valley would build on the advantages brought by the research capabilities and resource improvement programs of the Authority.

That December, TVA held a conference with representatives of the state planning commissions within its borders. In the first session, Ferris clearly stated the importance of the commissions’ work: “The objective is a rising standard of living for the people of the region resulting from their direct participation in conserving and making use of the resources of national wealth of the region as a whole.”<sup>72</sup> He noted that modern industrial development required technical knowledge in an area’s available resources and potential. TVA’s trained staff, with connections to universities across the Valley, and its position as an impartial government agency

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<sup>70</sup> Commerce Department Service Committee, “The Authority’s Relationships to the Region’s Business Community,” February 1945, 1, 146: (Loose), Pope-Paty Papers, TVA Records, NARASE.

<sup>71</sup> *Ibid.*, 2-9.

<sup>72</sup> “Report of Conference between Representatives of State Planning Commissions and the TVA,” Knoxville, 12-13 December 1945, 2, 112: “913 Regional Planning, Social Planning, Economic Planning, National Planning, Etc.,” Pope-Paty Papers, TVA Records, NARASE.

allowed it to serve as an information center, serving state and community development groups looking to attract different companies. TVA was a “technical partner” to the people responsible for development.<sup>73</sup> Alabama State Planning Board Director W.O. Dobbins actively participated, freely discussing his state’s successes and failures. He praised Alabamians for having “the initiative, imagination and resources to promote this development.” TVA’s representatives lauded Dobbins, whose actions were exactly what the Authority expected from state commissions, and just what it hoped to provide for communities in the Valley.<sup>74</sup> The conference attendees worked to establish a clear set of objectives for both TVA and state and local committees. The Authority created a central information system, regularly distributing data on resources and industrial possibilities to communities. The conference also established a concrete methodology, premised on the fact that the region's "primary objective" was to generate industry with TVA and the state commissions serving as “a catalyser and advisor.”<sup>75</sup> Thus, by the end of World War II, the Authority began moving towards a solidification of its role in encouraging local development committees to bring industry to the South.

Ferris’s report and the first State Planning Commission Conference embodied a new direction for TVA, one that began with Lilienthal’s emergence from the power and Board fights and came into its own during World War II. In order to revitalize the southern economy, Lilienthal demanded a reconsideration of the basic relationship between the Authority and its customers. It would no longer seek to create an industrial-agricultural utopia marked by small, homegrown factories interspersed with self-sustaining family farms. Morgan’s communalism

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<sup>73</sup> *Ibid.*, 2-3.

<sup>74</sup> *Ibid.*, 4-5.

<sup>75</sup> *Ibid.*, 13-4.

gave way to Lilienthal's capitalist consumerism. Under his care, TVA actively encouraged the industrial development of the Tennessee Valley. Factories reserved blocks of TVA power, ensured the agency's continued operation and expansion, and brought jobs for the unemployed and payrolls for struggling communities. Valley leaders welcomed the change in policy. In Florence, Decatur, Guntersville, and communities all along the river, public and private organizations fostered an intimate relationship with TVA's planners that continued well into the postwar years. Leaders like Barrett Shelton embraced the assistance, working with Lilienthal in an aggressive recruitment campaign. World War II provided a tremendous boost. Defense orders flooded into the Southeast as government and private plants took advantage of cheap labor, cheap power, and a favorable business environment. By 1945, the Tennessee Valley had come to rely on industry for continued prosperity. The shift from agriculture to industry was in large part thanks to the growing cooperation between local communities and the federal government.

Arthur Morgan could not rejoice in the Valley's newfound prosperity. As he would recall in his account of TVA: "Individual self-interest is not an adequate basis for an enduring democracy or a healthy society ... Democracy can survive only in a society whose members have a sense and an understanding of their lives as parts of the ongoing totality of life and a loyalty to the totality that is greater than that to their own group and self-interest."<sup>76</sup> Morgan never forgave Lilienthal for his role in the Board fight of 1938, and his recollections belied a continued dislike for the new chairman's policies. However, in his critique of his former agency's redirection, Morgan uncovered an important shortcoming. In embracing industrial development, Lilienthal deferred many decisions to community leaders and factory owners – he allowed them to embrace their own goals and short-term gain in exchange for a broad-based

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<sup>76</sup> Morgan, *The Making of the TVA* (Buffalo, NY: Prometheus Books, 1974), 182.

program of long-lasting socioeconomic change. No longer concentrating on dam construction or direct employment, Lilienthal's agency transferred the responsibility for development to the state planning boards and civic organizations that directly interacted with the companies they were trying to entice into their community. In doing so, the Authority abandoned any hope for a transformation of southern society, relying instead on the potential of increased income to make the change for them. The Sunbelt South enjoyed remarkable economic success, but many southerners remained in the shadow of that newfound prosperity. David Lilienthal's TVA cooperated with local leadership in the growth of the southern economy, but in diverting attention away from the real needs of the region, the Authority became implicit in the consequences of that growth.

## CHAPTER 6

### A “Democratic Labor”: The Tennessee Valley Authority and Regional Development, 1947-1960

This region can contribute still more abundantly to the nation’s strength ... No one who knows the history of the past can have doubts about the future.<sup>1</sup>

In late 1948, the editor of the *Decatur Daily* and the city’s chief proponent of economic development, Barrett Shelton, pitched the idea of an regional development group to TVA Chairman Gordon Clapp, causing “a great deal of staff discussion.” The Authority encouraged Shelton, proposing financial cooperation with municipal and county power boards. Clapp suggested that Shelton contact “qualified professionals” versed in the needs of industries, yet objective enough to spread prosperity across North Alabama.<sup>2</sup> Clapp then provided an outline of a “North Alabama Development Council” designed for industrial recruitment. The council, later named North Alabama Associates (NAA), would serve as an intermediary between TVA and the State Planning Board and local civic and community development groups. It would gather and disseminate information on resources in Alabama’s Tennessee Valley, work to encourage local organization, and contact prospective companies.<sup>3</sup> Clapp and Commerce Director John Ferris visited Shelton in late December to solidify their plans. TVA promised to encourage local power distributors to make a minimum investment in the proposed organization, based on their

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<sup>1</sup> Title quote from Barrett Shelton’s speech before the United Nations General Assembly, entitled “The Decatur Story,” December 1949, 152: 2528, Bob Jones Papers; Opening quote from “Statement of Hon. Robert E. Jones, Representative of Eighth District, Alabama, Opening the Hearings on TVA Financing Bill,” [ca. 1957], 5, 148: 2467, Bob Jones Papers.

<sup>2</sup> Clapp to Shelton, 10 December 1948, 111: “901.04 1949,” Pope-Paty Papers, TVA Records, NARASE.

<sup>3</sup> “Organization of a North Alabama Development Council,” December 1948, *ibid.*

industrial and commercial receipts – the more business a distributor had, the greater responsibility it had to help its neighbors grow. Giving their approval to Shelton’s organization, the officials recommended he put a “good man on the job.”<sup>4</sup>

Shelton found that man in T.D. “Tom” Johnson, the former director of Alabama Power’s Industrial Development Division (and thus, former enemy of TVA’s program in the Valley) and twenty-year veteran of industrial recruiting. After leaving the utility in 1943, Johnson took a job at the Vanity Fair Mills in south Alabama, eventually traveling to Reading, Pennsylvania, before returning to Alabama in 1948 to get back into his “old line of work and first love.”<sup>5</sup> Founded with funds from the Huntsville and Decatur electric systems, the NAA eventually expanded to include Florence, Sheffield, and several other Valley cities.<sup>6</sup> Johnson divided his time between research and promotion, carefully documenting the advantages of the Valley, making personal contacts, and releasing publicity pieces. TVA enthusiastically supported the formation of the organization; as Johnson noted after a visit with officials at headquarters: “I came away with the deep feeling that ... [the] Tennessee Valley Authority had a wealth of information that would be most useful in our work [and] that we would receive their wholehearted cooperation in our efforts to develop new industry in the Valley.”<sup>7</sup> Johnson quickly found himself fighting to keep defense money flowing to North Alabama. He helped reactivate Huntsville’s Redstone Arsenal and offered his services to congressmen John Sparkman, Lister Hill, and Bob Jones, who hoped to locate a hydrogen bomb plant in the Valley. Sparkman related his confidence in Johnson to

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<sup>4</sup> Ferris to Gant, 10 January 1949, *ibid.*

<sup>5</sup> Johnson, Meeting of Cullman Rotary Club, 8 August 1950, 2-3, courtesy North Alabama Industrial Development Association (NAIDA).

<sup>6</sup> Huntsville left NAA after forming its own industrial development group, an act discussed more fully in Chapter 7. See “Area Organizations for Industrial Development,” June 1961, in Box 48: “620 Industrial and Commercial Development, Jan.-Jun. 1961,” ECD Papers, TVA Records, NARASE.

<sup>7</sup> Johnson, Untitled Speech, [ca. Jan.-Feb. 1952], 3, courtesy NAIDA.

the Atomic Energy Commission's General Manager, Carroll L. Wilson, calling the developer a "good man" who "will do a good job if called upon."<sup>8</sup>

One of Johnson's first projects in North Alabama proved to be his most difficult and, ultimately, his most disappointing. In 1949, TVA lobbied for the Air Force's proposed Air Engineering Development Center, listing four Valley cities as possible locations: Huntsville and Florence in Alabama and Tullahoma and Smyrna in Tennessee. Huntsville was an early favorite. The then-defunct arsenal provided ample land already owned by the government, with ready-made facilities awaiting occupation. The Army had already proven Huntsville's worth as a secure, well-powered city able to absorb the planned boom that came with defense employment. As one TVA report claimed, "Huntsville is an attractive and progressive community which demonstrated in World War II its ability to provide for a substantial increase in population." The government even had another facility nearby, Camp Forrest in Tullahoma (50 miles from Huntsville), which provided a test-flight space without removing "good agricultural land" from the regional farming economy.<sup>9</sup>

TVA prepared to expand the arsenal site to meet the center's needs, and planners assured the Air Force that even though the surrounding land was in "one of the most productive areas in the Tennessee Valley," the 200 families occupying tracts adjoining the arsenal reservation were not organized in "well-established communities."<sup>10</sup> Johnson and the NAA led the regional effort to convince the Air Force to locate in Alabama, cooperating with local civic groups, particularly

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<sup>8</sup> Johnson to Sparkman, 17 July 1950, 119: "A, Reactivation, Retention, or Expansion of Army Facilities, #1"; and Sparkman to Wilson, 24 July 1950, 119: "4G, Hydrogen Bomb Site," John J. Sparkman Papers [Senate] (Sparkman Senate Papers), Hoole.

<sup>9</sup> "Air Engineering Development Center: Adaptability of Sites in the TVA Area," May 1949, 6, 19: "044.42 V.F.," Government Relations and Economic Staff, General Correspondence, 1953-57, Office of the General Manager (GRES Papers), TVA Records, NARASE.

<sup>10</sup> *Ibid.*, 2-3. Again, TVA proved willing to sacrifice the needs of the few for the benefits to the many. With an improved local economy, Authority leaders believed, those 200 families would undoubtedly lead a much better life.

the Huntsville Industrial Expansion Committee (HIEC), but with no success. Tullahoma proved a better fit, though the proximity to Huntsville allowed the city to gain some jobs. In the end, the expansion of Redstone Arsenal, announced the same year, proved a much greater victory, bringing thousands of jobs and millions of dollars to the community, quickly outpacing Tullahoma, but the loss left Johnson heartbroken.<sup>11</sup> He later recalled, “There was quite a let-down in Huntsville. Naturally, it was difficult for me to keep my chin up.”<sup>12</sup> The failed bid for the Air Engineering Development Center provided quick on-the-job training for Johnson, as well as a clear example of the necessity of regional cooperation in the pursuit of potential industries – government and private alike.

Even as Johnson and NAA lobbied for the AEDC, the group juggled a number of other projects that ultimately proved more profitable – a “silver lining in the clouds” that lingered from that first failure.<sup>13</sup> Johnson continued his work to lease the surplus Huntsville Arsenal properties, helping land the Wernher von Braun team. He traveled to New York City in May 1950 to talk with officials at Monsanto Chemicals, experiencing “disgust, heartaches, and joy without limit” when he located a subsidiary, Chemstrand, in Decatur. The plant eventually brought over \$150,000 per year in taxes to the city.<sup>14</sup> Such trips became Johnson’s main tool in attracting industry to the Valley. As he told the Hartselle Chamber of Commerce, he visited a number of northern cities, well versed on the corporations looking to relocate and the names of all officials at each business. Johnson’s efficiency allowed him to call on more businesses per trip, yielding

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<sup>11</sup> “Looking Back on the Wind Tunnel Project,” *Huntsville Times*, 9 November 1949, 4.

<sup>12</sup> Johnson, Untitled Speech, [ca. Jan.-Feb. 1952], 5, courtesy NAIDA.

<sup>13</sup> *Ibid.*

<sup>14</sup> *Ibid.*, 6.

“the maximum of results.”<sup>15</sup> NAA worked to interest businesses in the old Dallas Manufacturing Company properties in Huntsville, one of a number of defunct cotton mills in the Valley. In 1951, Nashville’s General Shoe Company leased the property.<sup>16</sup>

Yet as Johnson noted, economic development work entailed more failure than success. NAA spent thousands of dollars attempting to bring the Air Reduction Company to Huntsville, hosting engineers and preparing detailed mineral studies. The company decided instead to locate near Paducah, Kentucky (another city booming on TVA power), alongside Goodrich Tires, Pennsylvania Salt, and DuPont Chemicals. Johnson met with Owens-Corning to place a fiberglass plant in the Valley, only to learn that the region’s gas infrastructure could not accommodate the company’s needs. Another great disappointment was Courtaulds, whose Lustre Fibres division wanted to locate in the South. Johnson worked with representatives of the corporation for two years, making numerous trips to New York to discuss the Valley’s business opportunities. After weeks of heated negotiations, officials took an option on a tract on the Tennessee River just south of Huntsville. The company began planning for construction, paying engineers to study the site, but at “the 11<sup>th</sup> hour,” Mobile produced a better counteroffer and the company located farther south.<sup>17</sup> For every success, Johnson could point to a number of spectacular failures, but he remained optimistic about the Valley’s future: “Patience and persistence are essential elements if we are to be successful in industrial development . . . When a prospect is lost we must be out after someone else, again making studies of special nature to develop a new interest to the point of their location.”<sup>18</sup>

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<sup>15</sup> Johnson, Annual Meeting of Chamber of Commerce, Hartselle, Alabama, 28 February 1952, courtesy NAIDA.

<sup>16</sup> Johnson, Untitled Speech, [ca. Jan.-Feb. 1952], 7, courtesy NAIDA.

<sup>17</sup> *Ibid.*, 7-10.

<sup>18</sup> *Ibid.*, 10.

Johnson's persistence certainly paid dividends. The revitalization of the arsenal alone cemented his legacy as an architect of the postwar boom. Monsanto, which opened with 200 jobs in 1952, expanded dramatically throughout the 1950s and 1960s. Worthington Air Conditioners, growing rapidly in the postwar economy, planned to reach \$5 billion in sales by 1958, promising to be "good neighbors" to the Valley community. In 1959, Minnesota Mining and Manufacturing Company, better known as 3M, announced plans to construct a \$4.5 million plant west of Decatur to produce the water- and stain-repellant chemical Scotchguard.<sup>19</sup> Many of the companies NAA attracted bought sites along the Tennessee River, utilizing the water for industrial processes, the river for navigation, and contracting with municipalities for large amounts of cheap electricity. Johnson relied on TVA for assistance in conducting research on the Valley's offerings, and in return, the developer brought in business to help the Authority grow. TVA's relationship with NAA proved remarkably beneficial to both parties, and the agency looked to such regional organizations to carry out its vision of economic success.

TVA's position as a regional coordinator of industrial development was a logical extension of Lilienthal's original outlook. The former chairman consistently stressed the agency's impartiality, a necessity born from its role as a federal agency and its position as a steward of regional resources. In North Alabama, the Authority helped the Alabama State Planning and Industrial Board, regional groups like the NAA, and local organizations like Decatur's Chamber of Commerce and the HIEC work together, share information, and provide a combined front when recruiting potential industries. Some aspects of the Authority's postwar economic role remained true to Morgan's vision. TVA continued to instruct residents in

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<sup>19</sup> John Washburn, Executive Director, NAIDA, "'Success Story' Chronicles Industrial Growth," *Decatur Daily*, 20 June 1976, B1; "New Plant to Be Operating by December 1," *Decatur Daily*, 24 July 1953, np; and "3M Announces New 4 ½ Million Plant in Decatur," *Hartselle Enquirer*, 23 July 1959, 1, clippings courtesy NAIDA.

strategies of local growth, and it still acted as a coordinator and initiator of programs, leaving communities to enact the real changes. In encouraging organizations like the NAA, Lilienthal's successors continued to create "new citizens" from the old. However, these "new citizens" were not Arthur Morgan's small farmers or craft workers. Instead, they were Lilienthal's laboring consumers, employed in the industries that communities attracted to the Valley and paid wages which returned to the community in the form of taxes, retail purchases, and continued local investment. The Authority emerged from World War II prepared to create a new economy and the Valley's community leaders were happy to oblige.

The Tennessee Valley Authority began as an integral part of the Franklin Roosevelt's program to reverse the Great Depression. Its plans for the South fit well in the larger idealism of New Deal, defined by historian William Leuchtenburg as "a broadly humanistic movement to make man's life on earth more tolerable, a movement that might even achieve a co-operative commonwealth."<sup>20</sup> Yet the TVA that emerged from World War II barely resembled its prewar manifestation. The transformation began in 1938 with the Board and Power Fights, and culminated during World War II as defense investment convinced community leaders and Authority officials to work more fully for industrialization. In this remarkable change, TVA mirrored the fate of New Deal liberalism. By 1945, Roosevelt's planners, sociologists, and reformers gave way to a new generation of liberals who fully embraced the consumer economy of the postwar era, and who acted to protect those they felt most responsible for its creation. Even as the Authority fully embraced the vision of David Lilienthal, who saw power production as a source of jobs and wages for the people of the Valley, old New Deal liberals sought to boost employment across the country, allowing as many as possible to participate in an era of unbridled prosperity.

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<sup>20</sup> Leuchtenburg, *Franklin D. Roosevelt and the New Deal*, 345-46.

The rapid decline of the New Dealers began almost as soon as they assumed power. Many of Roosevelt's most vaunted programs fell to legal challenges and faulty oversight. In 1937, the U.S. economy entered a sharp recession, proving to many of Roosevelt's detractors that his experimentation had failed. By the 1940s, the New Deal took a secondary role as the country shifted to wartime footing – as Roosevelt himself noted in a December 1943 press conference, “Dr. New Deal” became “Dr. Win-the-War.”<sup>21</sup> At the same time, an increasing awareness of civil inequality, spurred by wartime activism and Gunnar Myrdal's eye-opening *American Dilemma*, convinced some New Dealers of the need for a new focus on individual rights.<sup>22</sup> New Deal liberals did not completely abandon their Depression-era efforts. They still called for the federal government to maintain a “safety net” for those Americans in need of assistance, but they focused their attention on maintaining the gains made during the war. Inspired by the British economist John Maynard Keynes and driven by the belief that the Great Depression was a result of underconsumption, liberals turned to government spending to help industry expand. Successful businesses would hire workers and feed consumers, whose daily activities would then power the American economy.<sup>23</sup>

The TVA of the 1940s, 1950s, and 1960s continued the economic development programs begun under Lilienthal's wartime leadership. The Board and its division chiefs encouraged state and local organizations to approach and entice manufacturers to relocate in the Valley. The agency advertized vacated plants, government-owned parcels of land along the Tennessee River, and provided detailed surveys on available resources to anyone willing to listen. As Authority

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<sup>21</sup> Qtd. in Alan Brinkley, *The End of Reform: New Deal Liberalism in Recession and War* (New York: Vintage, 1995), 144. Brinkley is the quintessential study of the decline of the New Dealers.

<sup>22</sup> *Ibid.*, 168-9.

<sup>23</sup> *Ibid.*, 134-34, 138.

officials continued to facilitate the economic expansion of the Valley, they also focused new attention on recreation and tourism as an additional source of income for community growth. Decatur exemplified TVA's maturing development strategy. The city lay at the center of the Valley's postwar resurgence, with active local boosters and a close working relationship with the Authority. "The Decatur Story" became synonymous with TVA's success, even as the city was eclipsed by Huntsville's remarkable growth. Despite losing Lilienthal to the Atomic Energy Commission, the Board continued his program to create an industrial economy in the Tennessee Valley. Its successes and failures helped southerners embrace a new, non-agricultural economic base.

A number of respected southern historians have parsed the meaning of World War II in the American South. In particular, the southern economy has proven fertile ground for discussion of the impact of the war. In *Old South, New South*, Gavin Wright portrayed the defense boom that began in World War II as the culmination of the process by which the South's "colonial economy" gave way to a national one, based largely on defense spending, outside investment, mechanized agriculture, and increased industrialization and urbanization. As Wright noted, the southern "economic spectacle" retained many of its faults, including a preoccupation with unskilled, low-wage workers, but federal intervention, combined with local boosterism, brought about a new, Sunbelt economy.<sup>24</sup> A number of Wright's colleagues continued his analysis into this transformation, none better than Bruce Schulman in *From Cotton Belt to Sunbelt*. Schulman delved into the federal government's investments in the South, noting how, in response to the Report on Economic Conditions that labeled the South the nation's largest

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<sup>24</sup> Gavin Wright, *Old South, New South: Revolutions in the Southern Economy Since the Civil War* (Baton Rouge: Louisiana State University Press, 1986), 239-40. Neil R. McMillen's *Remaking Dixie: The Impact of World War II on the American South* (Oxford: The University Press of Mississippi, 1997) is an excellent introduction to the impact of World War II on all aspects of southern life. See also the first chapter ("World War II and the Postwar South") of Numan V. Bartley's *The New South, 1945-1980* (Baton Rouge: Louisiana State University Press, 1995).

economic problem, government agencies directed funds and projects to the seemingly blighted region. World War II provided the perfect opportunity for federal assistance, as Schulman noted, and the sound of “bulldozers ploughing military bases out of the ‘Old Plantation’” became quite familiar. He cited Lilienthal’s TVA as a perfect example of this federal investment strategy, as he and his fellow directors sought success via industrial growth.<sup>25</sup>

The Authority was a prime motivator in the transformation of the southern economy that occurred during World War II, but while Schulman captured the overwhelming urge among government leaders to “remake” the South, he missed the way local cooperation served to encourage federal investment. TVA’s wartime experience proved that industrial growth could occur on the “Old Plantation,” but Lilienthal and his colleagues learned that state and local leaders would need to play a central role in creating and facilitating that growth. The defense boom transformed the southern economy, but it also paved the way for a transformation in the means of developing that economy. As TVA entered the postwar years, its leaders continued to cooperate with Shelton and other Valley leaders in the revitalization of the South.

In 1947, TVA’s Commerce Department held a meeting of the directors of Valley state planning and development agencies at the site of TVA’s Fontana Dam in North Carolina. The Fontana conference reasserted the Authority’s stand on cooperation with community groups as a central aspect of its postwar program. In his opening remarks, Director John Ferris listed the assumptions underlying TVA’s relationship with the attendees. He stressed that the initiative for development lay primarily with individual communities. As an agency for regional resource management, TVA supervised the growth of the businesses responsible for turning natural and human resources into goods and services. Regional agencies, he noted, should use TVA’s

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<sup>25</sup> Bruce J. Schulman, *From Cotton Belt to Sunbelt: Federal Policy, Economic Development, and the Transformation of the South, 1938-1980* (Durham, NC: Duke University Press, 1994), 91-2, 95, 110-1.

assistance to create an environment favorable to business growth.<sup>26</sup> Ferris then gave specific instructions, describing how a “coalition” of Valley agencies could work independently, as well as in conjunction with each other and with TVA, to serve as a “technical partner” to locals interested in attracting industry. Ferris quoted an early TVA report on local development to instruct the conference’s attendees: “The planning of the Valley’s future must be the democratic labor of many agencies and many individuals, and final success is as much a matter of general initiative as of general consent.”<sup>27</sup> Arthur Morgan must have shuddered to hear Ferris co-opt his grass-roots idealism in an effort to industrialize the Valley, yet the Commerce Department director voiced a sentiment much in line with Lilienthal’s own program for economic progress. The communities along the Tennessee River would take the initiative to implement economic growth based on industrial recruitment, guided in their efforts by the TVA.

Alabama’s W.O. Dobbins was an active participant in TVA’s development conferences, and his State Planning Board continued to cooperate with the Authority to further the fortunes of North Alabama. In the years following World War II, the state agency worked feverishly to preserve the advantages that defense investment introduced in the state.<sup>28</sup> Dobbins’s group produced a massive ten-volume study of state industrial resources entitled *Alabama’s Industrial Opportunities*. Each volume carefully catalogued manufacturers in a given industrial sector, from agricultural products to electrical machinery. The publication presented the wide variety of resources the state offered industrialists while embracing an optimistic vision of the state’s

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<sup>26</sup> John Ferris, “Industrial-Business Development in the Tennessee Valley Region,” Meeting of Directors of Valley States Planning and Development Agencies and Other Organizations Interested in Industrial-Business Development, 9 July 1947, 2-4, 218: “901.02 Industrial 1944-1957,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>27</sup> *Ibid.*, 11.

<sup>28</sup> State Planning Board Minutes, 17 January 1947 and 26 June 1947, SG13419:3, James E. Folsom Administration Papers (1947-51) (First Folsom Administration Papers), ADAH. This was particularly true in Mobile, where Dobbins and the State Planning Board worked to use the expanded state docks to accommodate the needs of private industry.

future. In the introduction of each volume, Dobbins wrote, “The people of Alabama look forward to an improved economic and social order. The foundations of the future rest upon the development of industries which will utilize the resources, labor, and capital of the state.”<sup>29</sup> In an accompanying summary, Dobbins boasted that his state had “many attractions for industrial leaders,” particularly mineral resources; cheap labor, fuel, and electricity; and a strong regional market.<sup>30</sup> TVA’s influence is apparent. Like his fellow leaders of state industrial groups across the South, Dobbins created a rudimentary database of industrial information, available for any community interested in recruiting industry. Granted, the State Planning Board assumed a larger responsibility for interaction with prospective industries than the federal agency, but like TVA, Dobbins’s group relied largely on local and regional development organizations to take the first step. Discussing the usage of TVA lands in North Alabama, Dobbins pledged to assist in the Valley’s growth by creating a general development plan, encouraging local and county planning boards to act, and providing them with technical assistance.<sup>31</sup>

In fact, in the late 1940s and early 1950s, Alabama followed many of its fellow southern states in creating a more favorable environment for the recruitment of industries.<sup>32</sup> In 1949, the Alabama’s state legislature passed the Cater Act, authorizing the formation of municipal industrial development boards and empowering them to acquire and furnish land, sell and lease

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<sup>29</sup> The volumes are scattered throughout the ADAH collection. For pertinent examples, see *Alabama’s Industrial Opportunities, Volume 7: Stone, Clay, and Glass Products* (Montgomery, 1947), SG13419: 4(4), First Folsom Administration Papers, ADAH; and *Alabama’s Industrial Opportunities, Volume 9: Electrical Machinery and Volume 10: Automobiles and Automobile Equipment* (Montgomery, 1947), SG13437: 13, First Folsom Administration Papers, ADAH.

<sup>30</sup> Dobbins, “Summary Industrial Opportunities in Alabama (Preliminary Draft), 4, 12, SG13437: 15, First Folsom Administration Papers, ADAH.

<sup>31</sup> Memo, Aelred J. Gray, 29 April 1955, 7: “092, Alabama A-Z,” GRES Files, TVA Records, NARASE.

<sup>32</sup> This was particularly true of Mississippi. The state’s Balance Agriculture with Industry program accelerated its efforts in the postwar years, attempting to build off of the state’s wartime industrial gains. See James C. Cobb, *The Selling of the South: The Southern Crusade for Industrial Development, 1936-1980* (Baton Rouge: Louisiana State University Press, 1982).

property, and issue bonds. The 1951 Wallace Act followed, allowing municipal governments to finance the construction and furnishing of incoming businesses, as well as any other improvements needed on manufacturing and commercial projects. As the two acts suggested, the state government took a more active role in industrial development across the state.<sup>33</sup> The State Board changed its name to reflect the increased emphasis – it became the State Planning *and Industrial* Board, though its actions changed little. Since World War II, it focused on industrial recruitment as the most promising possibility for economic advancement. Through the 1950s, the group continued to collect information and coordinate work with local development groups. The Cater and Wallace Acts mobilized community groups and civic clubs to sponsor industrial parks and to prepare factories for potential industrial clients. In fact, the laws specifically encouraged facility and site planning in industrial recruitment. TVA’s developers wholeheartedly embraced the practice, which allowed the Authority to use its substantial regional land holdings as an incentive for economic growth.

By the 1950s, the Authority’s construction program was a distant memory, especially in North Alabama, where over a decade had passed since TVA finished major construction at Guntersville. From time to time, the agency renovated its facilities, even adding new steam plants to dam sites, but for the most part, the boundaries of land needed by TVA had been set. In some places, the Authority owned wide swaths of land along the Tennessee River that were no longer required as insurance against an untamed flood or as potential dam sites. The land had become valuable as the setting for future industrial growth. Located alongside a main navigation artery, in a zone of cheap power and labor, TVA’s waterfront sites proved the perfect asset for

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<sup>33</sup> Charles M. Stephenson, *Industrial Sites: A Community Problem* (Bureau of Public Administration, University of Tennessee, 1961), 6-7, 48; loose, Division of Navigation Development Volume Files, 1954-1968, Office of the General Manager (Navigation Files), TVA Records, NARASE.

regional development. In 1955, TVA began assisting state and local groups in utilizing its available land. The Government Relations and Economics Staff released a report on industries located alongside Authority reservoirs. The bureau surveyed 107 waterfront establishments, including 56 manufacturing plants accounting for ¾ of the \$2.3 billion invested on the waterfront, as well as 39,000 of 42,000 waterfront jobs. The report noted an additional 63 sites, consisting of 74,500 acres suitable for industrial use.<sup>34</sup>

Despite the number of locations, the “choice” spots were necessarily limited, so careful planning was needed to match industrial requirements with the specifics of each site: “Many waterfront communities will find it in their self-interest to reserve, plan, and develop much of their remaining waterfront land exclusively for industries.”<sup>35</sup> In particular, TVA recommended industries such as pulp and paper mills, inorganic chemical plants, synthetic fiber manufacturers, and electro-metallurgical producers, all of which made use of the water supply for cooling and transportation (and contracted for blocks of cheap power).<sup>36</sup> The report ended with a note of caution. Waterfront sites promised profitable returns when used by industry, but also met recreational, even irrigational needs. The key to planning for waterfront industrial sites was “a well integrated program using the resources of all responsible agencies to achieve sound development.”<sup>37</sup>

Planning necessitated the inclusion of state and local agencies already working with the Authority for development. TVA’s Aelred J. Gray met with state officials to discuss land along the shores of TVA reservoirs, valuable as both industrial sites and recreational areas. Gray

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<sup>34</sup> Government Relations and Economics Staff, “Industrial Development on the Tennessee River,” January 1955, 3, 15: “901.2 Industrial, 1955,” GRES Papers, TVA Records, NARASE.

<sup>35</sup> *Ibid.*, 6-8, 17-18.

<sup>36</sup> *Ibid.*, 20.

<sup>37</sup> *Ibid.*, 28-9.

admitted that the studies of waterfront industrial areas were still in need of “broad planning” and coordination, and that utilization depended largely on the activities of local groups. Dobbins remained optimistic, telling Gray that since “industrialization and urbanization of the South in general and north Alabama in particular was almost certain to occur ... lands along the reservoir represented a major resource in this development.”<sup>38</sup> Gray also held discussions with civic groups in Florence interested in attracting industries to locate along Wilson Reservoir, despite the “high land values” of lake-front lots. TVA convinced Lawrence and Colbert Counties to create planning commissions to advertise their sites, and in Decatur, where city planners were already creating a land-use survey, agency officials helped zone industrial land on the Tennessee.<sup>39</sup>

By the early 1960s, the Authority’s land use policies had matured. In 1961, Government Relations and Economics staffer Charles M. Stephenson called the availability of industrial sites one of the most “pressing problems of local economic development.” Site preparation involved a number of “modern” development techniques, including community planning, zoning, subdivision control, highway access, taxation, local transportation, and parking regulation. Community groups were expected to clear and grade land, provide access to highways and railroads, prepare utilities, and even clear local legislation needed by potential businesses.<sup>40</sup> Stephenson cited successful campaigns by Valley groups that had used site preparation to attract companies. Huntsville Industrial Sites raised its funds from stockholders and built an industrial

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<sup>38</sup> Gray, Untitled Memo, 29 April 1955, 7: “092: Alabama A-Z,” GRES Papers, TVA Records, NARASE.

<sup>39</sup> Gray to Robert B. Nichols, Navigation Engineering Section, 2 March 1956, 15: “902.2 Industrial, 1956-57”; and Gray, Untitled Memo, 30 December 1955, 8: “092.1 Counties A-L,” *Ibid.*

<sup>40</sup> Stephenson, *Industrial Sites*, 1-2, 48: loose, Navigation Files, TVA Records, NARASE.

park with marked success. Guntersville's local development organization purchased a TVA tract alongside the reservoir, dividing the purchase into residential and industrial sites.<sup>41</sup>

Perhaps the greatest success of TVA's land use policies came in Decatur. Much of the city's industrial growth during the war occurred along the Tennessee River, including Ingalls Shipbuilding, Alabama Flour Mill, and several oil companies. With the end of the war, however, Decatur faced the challenge of expanding an already crowded industrial sector. City leaders looked to the Authority for assistance. Ferris's Commerce Department recommended a careful preparation of new sites, extending road, water, and city utilities to waterfront land outside current municipal boundaries. The agency even provided preliminary data on eight specific sites, with descriptions, needed improvements, and the estimated cost of getting each ready for industrial use.<sup>42</sup> Informative studies were important, but officials wanted to go further to "insure the future availability of waterfront sites for the industrial growth of the Valley." Director J. Ed Campbell of TVA's Reservoir Properties Division suggested "additional positive action," creating a checklist of available land, clearing titles, rescinding surplus declarations that made land harder to transfer to private control, and actively matching industries to particular sites.<sup>43</sup>

TVA could only make recommendations. State and local groups collected industry-specific data and interacted with interested businesses. Working in conjunction with the State Planning Board, Decatur's City Planning Commission delved even further into the possibilities of waterfront land. Their report recommended contacting manufacturers in need of riverside resources (such as lumber), as well as factories dependent on waterborne transportation (such as

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<sup>41</sup> *Ibid.*, 16-17.

<sup>42</sup> Commerce Dept., "Physical Problems Relating to Industrial Waterfront Development at Decatur, Alabama," January 1948, 57: loose, Navigation Files, TVA Records, NARASE.

<sup>43</sup> Campbell to General Manager John Oliver, 27 May 1954, 15: "901.2 Industrial, 1955," GRES Papers, TVA Records, NARASE.

agricultural processors, lumber mills, and watercraft manufacturers). The group planned to expand road and rail connections, build conveyors down to the river, and dredge shallow areas, all in an attempt to expand the city's water frontage.<sup>44</sup> Soon, outsiders referred to Decatur's waterfront as Alabama's "Gold Coast," with investments totaling \$65 million and companies employing over 5,000 local men and women.<sup>45</sup>

One 66-acre waterfront site sold in conjunction with adjoining private land to the Worthington Air Conditioning Plant. The company was so sure of its purchase that it began improving the site two months before the public auction, a sign that city leaders worked carefully with potential clients to ensure an easy transition. Worthington officials praised the city: "[Our] selection of Decatur as a manufacturing site was an excellent choice. In fact, we do not know how we could have done better."<sup>46</sup> The city's chamber of commerce purchased several land tracts, financed by a combination of public subscription and mortgage loans. The city sold two "sizable" sites to industries, including a 357-acre tract to a manufacturing plant. On another plot, Decatur officials removed buildings, graded land, and held a public subscription drive, all in an effort to bring in an unnamed factory.<sup>47</sup> In addition to Worthington, Monsanto's Chemstrand, and 3M, postwar investment in the city included Wolverine Tube, Expanded Foam Products, Valley Steel Construction, and a number of smaller concerns.<sup>48</sup> Wolverine's leadership specifically cited the waterfront location as a prime consideration in its decision to move

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<sup>44</sup> Decatur City Planning Commission and Alabama State Planning Board, "Preliminary Decatur Waterfront Development Report," June 1948, 14-18, SG13438: 1, First Folsom Administration Papers, ADAH.

<sup>45</sup> "Industrial Variety Makes Decatur Grow," *Huntsville Times*, 18 August 1959, 15.

<sup>46</sup> Richard J. Ricard, Manager, Guntersville-Wheeler Branch, Division of Reservoir Properties to Director Raymond J. Paty, 16 July 1953; and E.J. Schwanhauser, Executive Vice President, Worthington, to Paty, 29 July 1953, 12: "095 Decatur, Alabama," Pope-Paty Papers, TVA Records, NARASE. See also "New Plant to Be Operating by December 1," *Decatur Daily*, 24 July 1953, np, clipping courtesy of NAIDA.

<sup>47</sup> Stephenson, *Industrial Sites*, 15, 48: loose, Navigation Files, TVA Records, NARASE.

<sup>48</sup> Listing of Morgan County Industries, 1947-1961, from Alabama Manufacturing Directory, courtesy NAIDA.

operations to Decatur, which overcame competition from 274 communities in 11 different states to win the plant.<sup>49</sup> When L&N, the city's only major employer, closed its railroad shops in the 1930s, city leaders dreamed of the kind of economic growth that would characterize the economy of the late 1940s and 1950s.

In retrospect, the economic boom in Huntsville after World War II overshadowed Decatur's growth. Yet the work of Barrett Shelton, North Alabama Associates, the State Planning and Industrial Board, and TVA provides important insight into North Alabama's entrance into the Sunbelt. The federal agency actively worked to create an industrial economy in the Valley, yet consistently refused to act directly to recruit companies. Instead, the Authority encouraged community and civic groups to use their extensive studies of Valley resources and cooperative relationships with state and federal agencies to promote cities and counties and contact potential industrial prospects. Shelton, more than any other Valley leader, grasped the potential inherent in TVA's program. He kept in constant contact with the Authority, asked for information, petitioned for funds for city improvement, used the agency's influence to spur the Decatur Chamber of Commerce to action, and aided in the creation of a regional development organization, North Alabama Associates.

TVA's leaders encouraged Shelton's work; it provided a great advertisement for the agency's ability to use resource development and cheap power to revitalize the economy. In late 1949, he was invited to speak before the United Nations on behalf of TVA. In a speech entitled "The Decatur Story," he praised the Authority for its assistance in transforming Decatur "from nothin' to somethin'" in their fifteen-year partnership. He told his audience how the Depression doomed the city's one major industry, an L&N railroad shop, and how reliance on cotton

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<sup>49</sup> "Wolverine Picked Decatur Because of River Location," *Huntsville Times*, 16 July 1959, 8.

relegated the city to poverty. Soon, however, David Lilienthal and Harcourt Morgan encouraged the city to rid itself of the “old order” and “build toward a diversified agriculture and a diversified industry.” At the end of the 1940s, the Valley boasted 87 manufacturers (up 26 in the past eight years) with a combined payroll of \$12.6 million. For Shelton, the greatest change was the new mindset of the people of his city, who had become more confident and who now possessed a better “spirit” that would “go far” in attracting more industries.<sup>50</sup> As he wrote in a guest editorial for the *Huntsville Times*: “We are no longer afraid. We are confident. We know what we can do.” Henry Ford had promised a 75 mile-long city along the banks of the Tennessee River. Ford might have failed, but as Shelton noted, his dream had not died: “Today, thanks to the Tennessee Valley Authority and a vigorous and intelligent effort on a hundred local levels, that vision is coming true.”<sup>51</sup> The comparison was a telling statement as to the economic outlook of Valley leaders in the years after World War II, as well as the remarkable influence the debate over Muscle Shoals still held among the people of North Alabama.

Barrett Shelton, at least, had learned a valuable lesson from the Tri-Cities’ experience during the 1920s. Strong local leadership, building on community optimism and support, could successfully create economic opportunity out of government investment (or in the case of Muscle Shoals, the potential of such investment). TVA’s leaders, following the example of David Lilienthal, came to a similar realization. While the Authority could not relocate industries or fund local companies, it could encourage community groups to do so, and in the years surrounding World War II, the agency worked to revitalize the Valley economy through industrial development.

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<sup>50</sup> Shelton, “The Decatur Story,” December 1949, 152: 2528, Bob Jones Papers, UAH.

<sup>51</sup> Shelton, “Unity in the Valley,” *Huntsville Times*, 4 August 1950, 4.

Yet the experience of the Tri-Cities provided another example for those interested in economic growth – the consequences of unplanned and unregulated development for a community ill-prepared to handle a rapid transition from one economy to another. Florence’s leaders struggled through a real estate boom and bust, extending city services to new subdivisions only to watch them stand vacant. In fact, the Shoals’ growing pains were replayed in the postwar Valley, this time in Huntsville, where the rampant wartime growth of Redstone Arsenal, its decommission, and its revitalization created a series of crises for the city’s leadership. For the most part, however, the wartime emergency gave TVA and its regional groups little time for introspection. The agency helped its cities expand sewer systems and power grids, but many of those projects were a consequence of reservoir construction and rural electrification, not a greater understanding of the stresses of economic growth. Not until the 1950s would the Authority begin to consider the real consequences of economic growth for southern communities.

In 1953, TVA released the *Childersburg Pilot Study*, an “exploratory” examination of Childersburg, Alabama, thirty miles southeast of Birmingham. Conducted in conjunction with an eleven-person interdisciplinary committee from Auburn University, the study sought to understand the rapid industrialization of a small southern city during the defense boom and its consequent peacetime economic growth. Prewar Childersburg was a small farming and textile town without paved streets, streetlights, or sufficient water or power. In January 1941, the government decided to build a \$46 million smokeless powder plant on the Coosa River in the city. After a number of additions, the plant employed 25,000 men and women, 6,500 of whom moved to the city for work. The city struggled to house the workers and their families, establishing boarding houses, government barracks, and trailer parks on every available lot.

Traffic was horrendous – pedestrians had to wait up to an hour just to cross streets in the downtown area. The congestion prevented paving (since authorities could not shut down the only road into the plant), and the muddy roads became treacherous, leading to snarls. City leaders were overwhelmed to the point of inactivity. Instead of working to adapt their community to the bustle of industrial life, the leadership decided “it is only temporary and can’t last, so let’s pitch in and make money while we can; there’s always time for other things later.”<sup>52</sup> The plant suffered as well. Absenteeism cost the company 7% of its workdays, mostly from the city’s poor living conditions, which caused some to become sick and others to give up on industrial labor in favor of life back on the farm. The federal government tried to alleviate conditions, expanding city services and building roads, homes, hospitals, and schools, but it received no assistance from Childersburg’s leadership. When the mayor resigned, the office remained unoccupied for two years, with no one willing to take the job.<sup>53</sup>

The end of the war exacerbated the situation. Only 300 of the original 25,000 workers were retained at the plant, and the population of the city dropped from 9,000 to less than 6,000 almost overnight. The sudden removal of income spurred leaders into cautious action, and in cooperation with Alabama Power President Thomas Martin, Childersburg began planning for the future of the vacant plant. North American Rayon Company and a northern newsprint company decided to locate in the city in the early 1950s, thanks to local financing and site preparation, but the damage had been done. When the newsprint company advertised 856 openings, 40,000 job seekers sent applications. Worse, only 83 of the openings were for skilled positions, and just 14

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<sup>52</sup> *Childersburg Pilot Study: A Survey of the Impact of Rapid Industrial Development on a Southern Community* (Auburn Research Foundation, 1953), 3-5, 21: “901.02 (VFs),” GRES Files, TVA Records, NARASE.

<sup>53</sup> *Ibid.*, 6.

Childersburg residents were given jobs in the company's administration. Most of the skilled workforce in the city came from outside Alabama.<sup>54</sup>

The city still faced massive problems. Housing built during the war was “semi-permanent” and deteriorating, creating both a surplus of houses and a lack of suitable living quarters, especially for the city's growing families. Schools continued to face overcrowding, with classes held in auditoriums, halls, and even in school buses. A shortage of teachers led to the recruitment of “housewives.” In fact, the influx of new business did little to meet immediate needs. In order to attract the two companies, Childersburg authorized a ten-year tax concession, ensuring that none of the financial benefits of economic growth trickled down to the ailing school system or any other municipal service.<sup>55</sup> Health facilities and social and religious institutions faced similar problems. Demands for hospitals, leisure activities, and churches outpaced the city's offerings – at the time of the report, Childersburg only had two doctors, one in the army and another “very sick.”<sup>56</sup>

Perhaps the most disturbing aspect of the Childersburg report was a sociological study conducted on the city's high school seniors. Students were divided into two groups: those who had lived in Childersburg for over eleven years (before the rapid growth) and those whose families came to the area during and after the war. Using the “Family Adjustment Test,” researchers determined that the “native” children expressed “homey” feelings, defined as a positive sense of their home and community life. The “foreign” children, however, tended towards feelings of “homelessness”: “negative, cold, hateful, and loveless” emotions usually expressed when a subject “feels himself moving away from the family group or its members [or]

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<sup>54</sup> *Ibid.*, 6-13.

<sup>55</sup> *Ibid.*, 23-4.

<sup>56</sup> *Ibid.*, 27.

feels that his family group or its members are desirous of moving away from or repelling him.”<sup>57</sup>

The Childersburg study provided a warning for any community development leader considering industrial growth. The defense boom and bust greatly affected the city and surrounding country, in ways that were not always readily apparent, and in ways that provided no easy solution.

TVA’s immediate impulse was towards more regional planning, paying particular attention to the “environment” (widely defined) of industrial communities. In December 1953, TVA officials and colleagues at Auburn University met with Alabama State Chamber of Commerce and Alabama Power leaders to discuss the problems of rapid industrialization. TVA’s representatives stressed the need for an organized effort to study communities like Childersburg. The State Chamber failed to see the significance. Its representative on the study argued that newer residents in Childersburg had yet to adjust to the community, and defended companies who kept workers from gathering to discuss problems, comparing the workers to “wives [who] get together and ‘share gripes.’” He also rebutted criticism of the city’s tax incentives, saying that without them, companies would never agree to relocate, especially to an area recovering from “high government spending.”<sup>58</sup> As TVA and Auburn representatives later noted, while the state’s industrial leadership welcomed TVA assistance, they failed to understand the real purpose of the meeting: “There was ... a tendency on the part of the representatives from the Chamber of Commerce and Alabama Power and Light to push the project in the direction of industrial promotion.” The agency even suggested working with social scientists to advise both local communities and industries on the “full impact” of industrialization.<sup>59</sup> Without state assistance, TVA would be forced to work more closely with local and regional groups, stressing

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<sup>57</sup> *Ibid.*, 44.

<sup>58</sup> “Auburn Research Foundation: Conference on Problems of Rapid Industrialization of the South, December 9-10, 1953,” 16: “901.2 Industrial, 1954,” GRES Files, TVA Records, NARASE.

<sup>59</sup> Vernon W. Ruttan and Hershel Macon, to L.L. Durisch and Stefan H. Robock, 8 January 1954, in *Ibid.*

the need for careful consideration of all the effects of economic growth, not just job and income creation.

In February, TVA held a second conference with much higher participation from Alabama's business community, including representatives from the Alabama Gas Company, Alabama Power, and state highway, education, and employment agencies. TVA's Stefan Robock started the conference with a clear mission statement: "It is not enough for a community to attract industry, it must hold it and keep others coming. It must prepare for expansion, be ready to absorb the people and solve the associated problems." Here was the central purpose of the Childersburg study; however, some leaders refused to learn the lesson. Alabama Power Vice President Cooper Green continued to call for industrial recruitment, telling the assembly, "We must try to sell industry on Alabama," but others began to get the message. One attendee replied, "The goal is what will we do [sic] if industry comes to our community." Auburn economist H. Ellsworth Steele concluded with an apt analogy: "This discussion may be compared to two highways, each with many by-ways; one dealing with attracting industry to Alabama, the other with what can be done to make it easier for existing firms, the people, governments, etc. to be happier and to ... function."<sup>60</sup> In the end, TVA failed to convince the businessmen of the need for integrative studies to solve community problems, but Robock did note that the pilot study and the cooperation between TVA and Auburn began to break down barriers.<sup>61</sup> It also highlighted the differences between state business leaders, pushing for development, and TVA, which hoped to consider some of the consequences of such growth.

The Childersburg study and the Auburn conferences evidenced a growing realization among some in TVA that true economic development required more than simply encouraging

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<sup>60</sup> "Second Conference on the Impact of Rapid Industrialization, February 17, 1954," 1-3, in *Ibid.*

<sup>61</sup> Robock to Edward A. Ackerman, Assistant General Manager, 23 February 1954, in *Ibid.*

local communities to attract industries to the Valley. Real planning necessitated a combination of economic growth and community preparation. Cities and counties only benefitted from the jobs and paychecks of a company if the surrounding community adequately prepared for the consequences of economic growth.

Thus, the agency was forced to address an issue its founders had debated in the years before World War II. Both Arthur Morgan and Franklin Roosevelt argued for a social revolution to accompany the economic revival of the Tennessee Valley. They called for an end to the “rugged individualism” that had hampered communal cooperation and had perpetuated the failing cotton monoculture. By the 1950s, southerners had seemingly swapped one economic problem for another. In an attempt to create employment and incomes, TVA’s leaders again fostered single-minded economic growth, albeit a kinder, gentler program that brought the benefits of navigation, flood control, agricultural education, electrification, and resource planning. Yet in encouraging industrialization, they failed to bring real community development that would extend the benefits of prosperity to all inhabitants, and the hurried nature of the defense crisis exacerbated the situation. Through the late 1950s and early 1960s, TVA worked to combine growth and community betterment. In a 1962 statement on the Valley’s economic health, Aelred Gray reminded readers of his agency’s focus on the “comprehensive development of resources” and urged his organization to upgrade facilities and services. He had to remind fellow economists that industrial development was “but one aspect of assuring the use of area resources.” Only when local groups adopted wise policies and utilized TVA’s experience and technical knowledge would the Valley economy truly blossom.<sup>62</sup>

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<sup>62</sup> J.E. Watson and Aelred J. Gray, “Industrial Development in the TVA Area,” January 1962, 17-18, Box 48: “620: Industrial and Commercial Development, Jan.-Mar. 1962,” ECD Files, TVA Records, NARASE.

By the 1960s, Gray argued, the urbanization and industrialization of places like Huntsville, Knoxville, and Chattanooga simply aggravated the problem. In order to reach a “satisfactory adjustment” of Valley residents, the Authority needed to focus on the “improvement of depressed areas” as part of the larger program of economic development. TVA’s “broad orientation” provided the leverage for a comprehensive approach that reinforced cooperation between different civic and regional organizations. Gray specifically referred to TVA’s nascent tributary area policies as a possible beneficiary of a more hands-on approach to local development. He concluded, “In this cooperative program TVA has an opportunity to point the way for a broad inter-governmental approach to urban development. In fact, because of TVA’s across-the-board interest it may be the only Federal agency capable of taking this approach.”<sup>63</sup>

In suggesting a focus on the unified resource development of depressed areas, the agency finally came full circle. The birth of the tributary area policies marked a return to the Authority’s call for larger change, though tempered by decades of relatively unregulated economic growth. By the 1950s, some within TVA began considering the consequences of growth, yet the agency could not ignore the rapid economic expansion of the wartime and postwar South. In fact, even as the Authority cautioned groups in the indiscriminate recruiting of business, it continued to encourage communities to bring in jobs and paychecks. At times, the desire for intelligent development and the need for new sources of income coalesced; at other times, the two goals clashed. TVA’s work to improve the recreational facilities of the Valley best illustrates the difficulty the agency faced in attempting to balance economic growth and resource development.

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<sup>63</sup> Gray to Durisch, 19 November 1962, 48: “620 Industrial and Commercial Development, July-Dec. 1962,” ECD Files, TVA Records, NARASE.

TVA's planners included recreation in their larger vision of Valley development at the agency's inception. In his address asking Congress to pass the TVA Act of 1933, Roosevelt stressed the importance of local cooperation in the development of recreation areas.<sup>64</sup> In fact, recreation played a key role in the president's New Deal. Civilian Conservation Corps workers built lodges, pavilions, and other amenities at national and state parks across the country. Both the Public Works Administration and the Civilian Works Administration included maintenance programs for park facilities. Roosevelt saw recreation as a potentially valuable means of buttressing American confidence, not to mention a source of relief employment for the millions out of work.

Within the Tennessee Valley Authority, recreation largely took a back seat in the 1930s to dam construction, relief employment, and power expansion. In 1940, the president noticed as much when he addressed the growing opinion that TVA had been created solely to produce electricity. In a message to Congress, he noted, "It is coming to be realized more and more that in the improvement of our American civilization we cannot stop at hospitals and schools any more than we can confine ourselves to strictly economic subjects. Recreation in its broad sense is a definite factor in the improvement of the bodies and minds of our future citizens."<sup>65</sup> Yet again, TVA followed Roosevelt's prescription, adopting his call for development while directing it towards employment and financial gain instead of larger social improvement.

Dam construction provided a ready-made resource for recreational development in North Alabama. By 1940, the Tennessee River had been tamed, creating Pickwick, Wilson, Wheeler, and Guntersville Reservoirs in North Alabama. As Regional Planning Studies Director E.S.

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<sup>64</sup> Franklin D. Roosevelt, "A Suggestion for Legislation to Create the Tennessee Valley Authority," 10 April 1933, 128, in Roosevelt, *The Public Papers and Addresses of Franklin D. Roosevelt, Vol. 2: The Year of Crisis, 1933* (New York: Random House, 1938).

<sup>65</sup> *Congressional Record* (Senate), 76<sup>th</sup> Cong., 3<sup>rd</sup> sess., 1940, 86, pt. 1: 325-6.

Draper noted, the “viciously swirling” Tennessee was replaced by placid, scenic lakes surrounded by government-owned land. The lakes boasted waterside parks and boat docks, and nearly all planned further development, including cabins, stables for horseback riding, hiking trails, and educational facilities.<sup>66</sup> In 1933, Valley streams consisted of 100,000 acres of water; with the completion of major dam construction, that area increased six-fold.<sup>67</sup> With the end of World War II, the country’s newfound wealth and leisure time boosted opportunities for recreation. Over \$7 million in personal watercraft plied the waters of TVA lakes, and the number of summer cottages on the reservoirs doubled. The Authority encouraged such growth, cleaning up access areas on the banks of the river, selling camp and lodge sites, encouraging boat purchases, and regulating construction on its waterfront tracts in an attempt to balance financial gain and natural beauty.<sup>68</sup>

Boating was only one of the many activities associated with recreational growth in the Valley. In addition to hiking, picnicking, and horseback riding, TVA encouraged hunting and fishing on the acres of public land surrounding the reservoirs. For many in North Alabama, such activities were an important part of rural life, but the Authority worked to encourage recreational wildlife management as a source of additional tourism and county and state revenue. Months after assuming leadership of the TVA, Arthur E. Morgan received a letter from the southern regional director of the American Game Association asking for consideration of the “heritage of hunting and fishing” passed down to southerners as the legacy of Daniel Boone. He offered the assistance of the organization in using marginal lands to promote sanctuaries and public hunting

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<sup>66</sup> E.S. Draper, “Recreational Opportunities in the Tennessee Valley,” 2 May 1940, *Congressional Record* (Appendix), 76<sup>th</sup> Cong., 3<sup>rd</sup> sess., 1940, 86, pt. 15: 2607-8.

<sup>67</sup> “Vast Increase in Recreation Pointed Out in TVA Report,” *Huntsville Times*, 6 January 1952, 2.

<sup>68</sup> “Growth of Recreation Industry,” *Huntsville Times*, 11 June 1950, 4; and “Amazing Growth of River Recreation,” *Huntsville Times*, 1 July 1951, 5.

preserves, promising that “outdoor recreation among unspoiled woods, waters and wildlife can be maintained in the midst of an intensive agricultural and industrial area.”<sup>69</sup> The president apparently agreed. In 1938, Roosevelt set aside 41,000 acres of TVA land in Limestone, Madison, and Morgan Counties alongside Wheeler Reservoir for the Wheeler Wildlife Refuge, protecting the waterfowl that migrated annually from the Gulf of Mexico to the Great Lakes.<sup>70</sup> As the steward of waterfront land, TVA jealously protected the right of the public to hunt and fish along the shore. When a group of locals purchased reservoir land at auction and attempted to section the tract into private lots with cabins, TVA forced the businessmen to remove the buildings. They complained, but TVA’s General Manager George F. Gant held the line, citing the agency’s “minimum rights” to ensure public use. The tract was one of the few access points to the reservoir and a popular spot for hunting and fishing, and the public agency determined to protect its recreational advantages.<sup>71</sup>

TVA worked closely with the state and other conservation groups to preserve land for public use. Besides the American Game Association, the agency planned recreational development with the Alabama Public Hunting and Forestry Association and Alabama’s Department of Conservation. As with other elements of the Authority’s program, cooperation was not always easy, and questions of jurisdiction and oversight colored every discussion, but the work ensured a more complete utilization of the state’s natural wealth.<sup>72</sup> As municipalities and counties realized the value of recreational planning, many looked to TVA for help.

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<sup>69</sup> A.C. Howard to Morgan, 18 August 1933, in George McJimsey, ed., *Documentary History of the Franklin D. Roosevelt Presidency, Vol. 28, Promulgation of the Tennessee Valley Authority* (LexisNexis, 2006), Doc. 84, 277-9.

<sup>70</sup> “Waterfowl ‘Refuge’ Is Set Up in Valley,” *Decatur Daily*, 12 July 1938, 1.

<sup>71</sup> Roy Spangler to Bob Jones, 22 August 1947; and Gant to Bob Jones, 29 September 1947, 236: 3443, Bob Jones Papers, UAH.

<sup>72</sup> A great example of the give-and-take between the State of Alabama and TVA on recreational oversight can be found in Gov. Chauncey Sparks to Lilienthal, 3 December 1945; Ben C. Morgan to H.A. Smith, 4 December 1945;

In 1952, for instance, Huntsville's City Planning Commission asked the Authority to help create a more orderly plan for the city's recreational facilities. Compared to Decatur, Florence, or Guntersville, Huntsville's access to the river was fairly limited, but TVA owned land away from the river as well, and the agency's holdings provided a base for the growing city's leisure needs. Municipal leaders noted TVA's willingness to set aside land and facilities for public use, including Little Mountain State Park at Guntersville and Joe Wheeler State Park west of Athens. Huntsville's parks were woefully inadequate, particularly city playgrounds, and planners hoped that the government agency would help create a recreational space that might allow the city to continue its expansion. The group gave specific acreage needs (323.97 for whites, 102.93 for blacks) and even noted the areas where each park could be placed.<sup>73</sup> As with industrial recruitment, cities found TVA a valuable ally in the desire for further recreational development.

Fishing regulation provides insight into the ways that TVA and state and local agencies cooperated to promote recreation in the Valley. Donald Isom of the Alabama Wildlife Federation worked to relax netting laws, hoping to remove the "coarse" fish such as shad and carp that choked TVA lakes and decreased the numbers of more popular game fish such as bass and bream.<sup>74</sup> In the 1940s, fishing license sales boomed – the number of licenses sold in Morgan County alone doubled in the decade after TVA entered the Valley.<sup>75</sup> By the 1950s, license sales had reached new records with ten state parks along TVA lakes and widespread boat purchases

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and Harcourt Morgan to Sparks, 8 February 1946, 110: "092 Alabama," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

<sup>73</sup> Huntsville City Planning Commission, "Long Range Parks and Recreation Plan for Huntsville, Alabama," September 1952, 1, 5-7, 16-17, SG12625: 6, Gordon Persons Administration Papers, ADAH.

<sup>74</sup> "Coarse Fish Bring New Problem in TVA Section," *Huntsville Times*, 9 October 1943, 6.

<sup>75</sup> Draper, "Recreational Opportunities in the Tennessee Valley," 22 April 1940, in *Congressional Record* (Appendix), 76<sup>th</sup> Cong., 3<sup>rd</sup> sess., 1940, 86, pt. 15: 2609.

allowing for much greater access to the water.<sup>76</sup> TVA also relied on state agencies for safety on its reservoirs. Even expert fishermen disregarded the turbulent water below the dams – especially after realizing that fish gathered to feed where water poured out of the turbines. TVA’s workers constantly warned locals to take care around the dams. They faced resistance from residents like Decatur’s Troy Martin, who told Congressman Bob Jones that “we know the water is dangerous, but feel that we know the waters well enough after all these years of fishing them to know when and where to fish. We do not feel that any TVA employee who probably has never fished under the dam in his life has any right to dictate where we shall and shall not fish.”

General Manager John Oliver, obviously frustrated, relayed to Jones the numerous measures taken to inform fishermen, including news releases, posters, even handouts. The dams released water as necessary, not on a specific timetable, and the sudden activity could capsize boats or smash them into the side of the structure: “For TVA to relax in any way its practice of forbidding fishermen tying boats to the dams or entering under the draft tube decks would be to ignore experience and invite tragedy.”<sup>77</sup> Martin claimed that he knew of no fishermen who had died from too close an approach to the dam, yet history proved him wrong. As early as 1938, TVA’s John Blandford complained to Lister Hill of a number of drowning deaths in pools and the river below the dam where locals insisted on forcing their “rough skiffs” into the swift currents in the dam’s spillways. Blandford noted TVA’s cooperation with local governments in warning fishermen of the danger of the dams, with mixed results, as Martin’s letter indicated.<sup>78</sup>

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<sup>76</sup> “Vast Increase in Recreation Pointed Out in TVA Report,” *Huntsville Times*, 6 January 1952, 2.

<sup>77</sup> Martin to Jones, 31 January 1953; and Oliver to Jones, 17 February 1953, 152: 2532, Bob Jones Papers, UAH.

<sup>78</sup> Blandford to Hill, 22 July 1938, 95: “Hill, Lister thru 1939,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

More than any other city, Guntersville, Alabama, took advantage of its new lakeside location to boost the local economy. The city exploited the “new resource base,” hosting an annual motorboat race with an attendance that regularly exceeded 50,000 per year. E.S. Draper predicted: “Waters of the lake, spouting outboard motors, cruisers, and yachts, where bottom lands formerly were devoted to corn, may be the harbinger of a new day.”<sup>79</sup> *Huntsville Times* reporter Eleanor Hutchens predicted that Guntersville’s income would switch from agriculture to “play.”<sup>80</sup> The city advertised its attractions across the Valley. As with industrial development, a desire for further recreational investment created difficult choices. As Guntersville grew, the city needed updated sewage disposal plants, partly to decrease the amount of pollution released into the river (and thus into the increasingly popular reservoir). When the city asked TVA to sell land along the reservoir for one dollar as a means of assistance, the agency refused. Chairman Herbert Vogel sympathized with the city’s plight, but noted the extent to which property values along the river had risen – from \$56.89 per acre when TVA purchased the land for the reservoir to \$1,101.32 per acre for lakeside plots. Vogel told Mayor T.E. Martin that because his city had become “a highly desirable recreational and industrial community ... such desirable and expensive properties” could not be sold for such a paltry rate, even for the expansion of city services.<sup>81</sup> While tourism made Guntersville relatively wealthy, the rise in property values complicated community development.

In some cases, the Authority also found itself forced to choose between recreation and the use of waterfront property for industrial purposes. In such cases, the agency turned to industry,

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<sup>79</sup> Draper, “Recreational Opportunities in the Tennessee Valley,” 22 April 1940, in *Congressional Record* (Appendix), 76<sup>th</sup> Cong., 3<sup>rd</sup> sess., 1940, 86, pt. 15: 2608.

<sup>80</sup> Hutchens, “Guntersville State Park to Feature Water Sports,” *Huntsville Times*, 4 November 1945, 1, 8.

<sup>81</sup> Mayor T.E. Martin to Vogel, Curtis, and Paty, 27 November 1956; and Vogel to Martin, 21 December 1956, 18: “095 Guntersville, Alabama,” Pope-Paty Papers, TVA Records, NARASE.

with its greater potential for income creation and economic diversification. In 1967, for instance, Huntsville's civic development group wanted to add acreage in the Wheeler Wildlife Refuge to a specially zoned industrial park. TVA attempted to accommodate the businessmen, drawing the ire of regional conservationists like L.C. Bartmess, a member of the North Alabama Conservation League. Bartmess complained to Congressman Jones that the encroachments for "industrial purposes" compromised the integrity of the refuge, threatening its existence and the benefits it brought to the Valley. He made the choice clear: "We cannot emphasize too strongly our interest and desire for business and industrial development along the river, but believe this can well be done without destroying one of our greatest natural assets." TVA Chairman Aubrey Wagner remained unconvinced. He responded to Jones that the "relatively narrow" strip of the refuge sold to Huntsville had almost no effect on the integrity of the preserve. Instead, he praised the work of the city's leadership who were "working on a plan to diversify and strengthen the economy" and who would use the land by "promoting additional industrial development."<sup>82</sup> The Authority valued recreation, but the promise of industrial growth consistently outweighed the needs of the Valley's outdoor enthusiasts.

By the 1960s, TVA could count recreation among its more successful programs for the economic growth of the Valley. Reservoirs covered nearly half a million acres and created 10,000 miles of new shoreline. In 1960 alone, over forty-two million visitors came to TVA lakes to boat, fish, hike, hunt, and camp. While recreation was secondary to the Authority's program for the Valley economy, it proved surprisingly profitable. The lakes created waterborne activities that had been rare in the region; before TVA, the Tennessee River was much too narrow, fast moving, and shallow to accommodate the millions of people who now toured the

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<sup>82</sup> Bartmess to Jones, 6 July 1967, and Wagner to Jones, 21 July 1967, 150: 2507, Bob Jones Papers, UAH.

region. The Authority preserved public use of the river, working closely with state, local, and even private groups operating the numerous parks, boat ramps, cabins, lodges, and marinas along the Tennessee. The statistics spoke to the program's success. Fishing increased fifty-fold on Valley reservoirs by 1960 alone. Recreational use also increased steadily after World War II, topping 10 million visits in 1960. The program even addressed some concerns about the consequences of industrialization. As the Valley urbanized and industrialized, recreation relieved "the stresses and strains of congested living."<sup>83</sup> For Authority planners, recreation was more than just resource planning. As Gunter'sville's success showed, recreational development created real economic benefits for Valley towns located along or near reservoirs. TVA encouraged locals to promote tourism in their areas, setting aside land and cooperating with state and local agencies to found refuges, regulate access, and protect the public's right to "play" on the river. In a nation with free time and freer finances, the Valley's natural resources provided the perfect opportunity for economic growth, as long as communities worked to realize it.

By the mid-1960s, TVA's program for economic revitalization had matured and expanded well beyond the bounds of its original New Deal manifestation. In the wake of the defense effort, the Authority focused the bulk of its time and energy into economic development, particularly the facilitation of local and regional organizations tasked to attract industry to the Tennessee Valley. In some regards, this program continued a tradition older than TVA, begun in the years following World War I as businessmen and municipal leaders in the Tri-Cities sought to encourage growth as federal investment at Muscle Shoals stalled. Yet the Authority brought a new enthusiasm to the effort. Officials worked closely with area-wide groups such as the North

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<sup>83</sup> TVA, "Outdoor Recreation for a Growing Nation: TVA's Experience with Man-made Reservoirs," September 1961, 57: loose, Navigation Files, TVA Records, NARASE.

Alabama Associates and local chambers of commerce, particularly Decatur's, using diverse methods from data collection to planning assistance and site procurement in order to ensure the Valley's place as a center for public and private investment. The agency also expanded the scope of its development plans, rediscovering recreation as a means of boosting local finances. TVA's reservoirs and waterfront land combined to create a new demand for tourist services in the region, and the agency encouraged local, regional, and state organizations to embrace the additional opportunities for growth.

Boating, fishing, picnicking, and sightseeing brought jobs and money to the Valley, but the demand for waterfront recreation also brought conflict, especially as agency officials realized the value of its holdings. In its attempts to mediate between industrialists and conservationists, TVA often favored the former, preferring industrial development as the foundation of a modern southern economy. As an agent of regional industrialization, the Authority finally abandoned total resource management for sure economic gain. This transition became painfully clear as the agency faced a series of challenges as a result of its redirection. The TVA that emerged from the 1950s and 1960s proved profoundly different from the agency that built dams and tamed rivers across the Valley. Claiming a mandate to revitalize the Tennessee River watershed, this new TVA encouraged an economic modernization unrecognizable to all but a few of the agency's original founders.

## CHAPTER 7

### “An Agency of Its Own Creation”: TVA under Fire, 1945-1965

The government has the power to help human beings in need. It also has the responsibility to stimulate people to exercise initiative on their own behalf.<sup>1</sup>

The Authority's plans for economic development fared well in the years after World War II. The defense boom created fertile ground for industrial growth, and in addition to providing cheap electricity for commercial and domestic customers, TVA was able to encourage local initiative and regional cooperation, empowering cities and towns across the Valley to attract business, create jobs, and boost municipal finances. Even as agency leaders witnessed the success of its vision for the Valley, however, it also faced the greatest challenge to its existence since the power fight of the 1930s. The war spurred the physical expansion of TVA's power production capabilities, yet the agency's integral role in powering defense industries insulated it from major attacks on its appropriation requests. With the end of the wartime emergency, that protection no longer existed. As TVA powered incoming industries and a booming population of homeowners, it faced newfound hostility in Congress from a resurgent Republican Party. The election of Dwight D. Eisenhower in 1952 further concerned the agency's leadership. Unsure of the president's attitude towards the aging New Deal program, TVA fought to maintain its boundaries, particularly during the Dixon-Yates controversy of 1954. Fiscal conservatives were

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<sup>1</sup> Title quote from Bob Jones, Clipping, *Congressional Record* (House), 20 March 1956, 4615, 213: 3296, Bob Jones Papers, UAH; Opening quote from Dwight D. Eisenhower, *Mandate for Change, 1953-1956* (Garden City, NY: Doubleday & Company, 1963), 394.

not the agency's only challenge in the postwar years. As African Americans battled the southern status quo, TVA's acquiescence in segregation also faced opposition. Even its much vaunted labor policy failed to contain worker discontent. Finally, the resource-driven Authority found itself confronting the environmental effects of its economic policies. The political and social challenges of the 1950s marked TVA's growth as indelibly as its economic successes. The decade-long fight convinced the agency's leadership of the need for independence, leading to the enactment of one of TVA's most controversial, and most successful, pieces of legislation to date.

In fact, the TVA that emerged from the political and social challenges of the 1950s and 1960s embodied the transformation of the Valley itself. The Authority defended outdated race and labor policies, afraid to alienate southern boosters and industrialists interested in regional investment. Faced with evidence of environmental pollution, itself a direct challenge to the agency's stated purpose, TVA's leaders defended the businesses that populated the Valley. The Authority failed to address the social inequalities that continued to mark life in the South. Instead, its leaders superficially corrected the most grievous (and thus, most visible) problems while encouraging further investment. Yet just as social challenges helped delineate the Authority's role in southern life, political antagonism gave ultimate expression to its economic transformation. Hounded by opponents loathe to add funds or responsibility to a powerful federal agency, Authority leaders turned to privatization, hoping to remove their programs from the threat of political action or budget cuts. Supported by Valley leaders, TVA officials demanded and won the right to finance their agency, ensuring that each industry and customer attracted to the Valley contributed to the Authority's continued growth. By the mid-1960s, the transition away from New Deal idealism was complete. TVA became an agent of regional economic development, encouraging Valley residents to organize, prepare their communities for

growth, and attract the businesses that made that growth possible. The postwar TVA played an important role in the modernization of the southern economy. Organized to encourage development, the agency emerged unscathed, but not unchanged, from the challenges of the 1950s and 1960s to help Valley residents create and maintain an industrial economy on the farms and fields of an agricultural past.

One of the first postwar attacks on TVA came in the early 1950s when Republican Representative Frederic Rene Coudert, Jr., of New York attempted to decrease the agency's requested appropriation by \$14 million. Alabama's Bob Jones, then in his third year in the House, came to TVA's defense. Coudert's amendment threatened the construction of two Kentucky steam plants needed to meet rising electric demand. Jones charged Coudert with being "ill-informed or frightened" and claimed that the legislation represented another in a long series of attacks on the Authority by private power.<sup>2</sup> Coudert sought to "impair a national asset, deliberately to create a power shortage in the Southeast in 1955."<sup>3</sup> For his part, Coudert argued that any private power company could provide the needed electricity, particularly to the Atomic Energy Commission facilities at Paducah, Kentucky, and Oak Ridge, Tennessee, which were proving a profitable source of income in the Valley. Jones strongly disagreed. TVA's rates were much cheaper, and a contract with the federal government was less complicated than dealing with the private power. Coudert's legislation, in Jones's words, "goes against common sense and responds to the wishes of one of the most greedy [sic] and ambitious lobbies this Congress has ever seen."<sup>4</sup>

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<sup>2</sup> Jones, Untitled Speech, 10 April 1952, 152: 2529, Bob Jones Papers, UAH.

<sup>3</sup> *Congressional Record* (House), 82<sup>nd</sup> Cong., 2<sup>nd</sup> sess., 1952, 98, pt. 3: 3989.

<sup>4</sup> Clipping, *Congressional Record* (House), 82<sup>nd</sup> Cong., 2<sup>nd</sup> sess., 28 June 1952, 8538, 138:2327, Bob Jones Papers, UAH.

Over the course of the 1950s and 1960s, Bob Jones became the most strident of the Authority's defenders in Congress. Born in Jackson County in the northeast corner of Alabama, Jones served as a county judge in Scottsboro before joining the Navy during World War II. In 1946, Jones ran in a special primary for the congressional seat of John Sparkman, who succeeded John H. Bankhead, Jr., in the Senate. Throughout the campaign, the judge stressed two issues that would characterize his political career: agricultural assistance and "full support" for TVA.<sup>5</sup> Jones defeated eleven challengers to claim the seat, and in his first major vote, Jones helped appoint Gordon Clapp chairman of TVA's Board of Directors. When Tennessee's Kenneth McKellar criticized the Authority, Jones rose to its defense, inviting Republican congressmen to North Alabama to see "the real story of the Valley Authority ... which demonstrated that a heretofore economically depressed area, when given the means, could successfully lift itself by its own bootstraps."<sup>6</sup> He soon earned a telling nickname, "Mr. TVA."<sup>7</sup>

In retrospect, Jones's defense of the agency came at a crucial point in the Authority's transformation – as fellow Congressman Carl Elliot claimed, Jones's efforts were "like an arm in the dike against the angry waters threatening TVA."<sup>8</sup> As the Authority turned to economic development, it faced charges of favoritism, misappropriation, and disregard for Valley farmers. Its congressional defenders, particularly Jones, Sparkman, and Hill, ceaselessly defended the changing program. For Jones, TVA became a point of pride, a government program benefiting his state and community. Even as the agency abandoned its New Deal roots, Jones continued to see the Authority and farm relief as essential to continued prosperity. In addition to his work for

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<sup>5</sup> Jones has only one biography, a 51-page booklet written in 1960, sixteen years before he retired from public service. See William Wray Eckl, *The Story of an Alabama Congressman: Bob Jones* (1960), 2.

<sup>6</sup> *Ibid.*, 4.

<sup>7</sup> Lister Hill, qtd. in *Ibid.*, 13.

<sup>8</sup> Qtd. in *Ibid.*, 25.

TVA, he secured Federal Housing Authority funds for farm buildings, fought to raise cotton quotas, and supported waterways development that improved navigation in the state – Jones was instrumental in providing legislation for the creation of the Tennessee-Tombigbee Waterway, connecting the Tennessee River to the Tombigbee River and the Gulf of Mexico. In every action he took, Jones hoped to maintain the growth of personal income in the Valley, whether that growth came from industry, agriculture, or other federal investments.

Even more disturbing than Coudert’s appeal to privatization was the acquiescence of fellow Democrats in the attempt to limit TVA funds, and once again, Bob Jones came to the defense of the Valley’s economic development. Massachusetts’s John F. Kennedy, Jr., gave his support to Coudert, arguing that the continued financing of the Authority would drive industries from Massachusetts to the Valley. The future president cited numerous textile and shoe companies which relocated their operations to the area, and he argued that cheap power was the overriding reason for the industrial depopulation of the Northeast. Jones defended private interests locating in the Tennessee Valley: “I assume that the gentleman will agree that an important freedom in our economy is the freedom of management to locate where it will – to consider the availability of raw materials, of labor, of markets, in selecting the place it will live.” He dismissed Kennedy’s assertions as “myths” and “clichés of ... weary prejudices.” Instead of criticizing the textile and shoe manufacturers, Jones suggested, Kennedy needed to curtail the private power companies whose high rates had driven away his region’s industry.<sup>9</sup> The argument was not new. In fact, as early as the 1880s, when southerners began building cotton mills to process the region’s crops, New Englanders feared that southern economic growth came at their expense. Yet given the national support for government programs like TVA during the

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<sup>9</sup> *Congressional Record* (House), 82<sup>nd</sup> Cong., 2<sup>nd</sup> sess., 1952, 98, pt. 3: 3988-9.

New Deal and World War II, Kennedy's re-airing of the criticisms did not inspire confidence among those hoping to see the Valley continue its progress.

The fight posed a real problem for proponents of the Authority, many of whom wrote Jones to express their approval of his position. A.L. Couch, the manager of Scottsboro's Electric Department and a retailer of TVA power, praised Jones for his fight. The congressmen responded, "It is hard to realize just how often we must defend TVA and just how many enemies it has."<sup>10</sup> The *Huntsville Times* suggested that the Republicans showed a "lack of enthusiasm" for the agency and quoted four unnamed Democratic congressmen who feared that the Eisenhower administration would cause TVA to "choke to death."<sup>11</sup>

For his part, Eisenhower remained circumspect on the future of the Authority. He praised it for its work in the Valley, including the creation of new industries, the conservation of natural resources, the promotion of national defense, and flood control. He tried to ease concerns that he would attack the agency: "Certainly there would be no disposition on my part to impair the effective working out of TVA." Yet Eisenhower had no desire to see the agency grow even larger. He warned that the agency was not a "rigid pattern" for development elsewhere, and he used the Authority as an example of "creeping socialism," implying a stealthy attempt on the part of TVA leaders to expand their power at the expense of private enterprise.<sup>12</sup> His comments fed investigations into TVA's communist leanings that caused many to doubt the agency's motives. He also echoed the fears of New England congressmen, who provided "reliable information" that the Authority was "growing huge on federal taxes and producing cheap, government-subsidized

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<sup>10</sup> Jones to Couch, 5 May 1952, 152: 1519, Bob Jones Papers, UAH.

<sup>11</sup> "Stalled Steam Plant Program for TVA Seen," *Huntsville Times*, 5 December 1952, 1; and "'Choking to Death' the TVA," *Huntsville Times*, 14 December 1952, 4.

<sup>12</sup> "Gen. Eisenhower and TVA," *Huntsville Times*, 16 October 1952, 4; Marguerite Owen, *The Tennessee Valley Authority* (New York: Praeger Publishers, 1973), 97.

power [and] was drawing industry away from these other states and creating unemployment in their industrial towns.”<sup>13</sup> Eisenhower respected the work TVA had done in the Valley, but he refused to acquiesce in the expansion of a government monopoly on power production when similar measures were not implemented in other sections of the country. He recommended support of local power sources, including the creation of independent public power plants, built by county cooperatives, cities, and even states.<sup>14</sup> The Authority and its legislative backers refused to see Eisenhower’s stance as a matter of political economy. Instead, they defended the agency against an unwarranted attack on its financial lifeblood.

In October 1953, Tennessee Governor Frank Clement approached President Eisenhower, asking for his support for appropriations to TVA to fund construction of a new steam plant at Fulton, Tennessee, to meet increasing demand in the region. Much of the need came from defense projects, particularly the Atomic Energy Commission plant at Paducah, and Eisenhower saw the situation in western Tennessee as the perfect chance to cap TVA’s growth. He told Clement that Memphis, a growing urban area with booming power demands, should build its own plant, even though the action would break an existing contract for TVA power. Authority Chairman Gordon Clapp warned Eisenhower that no private utility wanted to assume the risks of financing a plant to provide power for the uncertain needs of defense work. The president called Clapp’s bluff. He ordered the Bureau of the Budget and the AEC to work together to find an alternative to increasing the “burden” on the federal government (i.e., funding a TVA expansion).<sup>15</sup>

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<sup>13</sup> Dwight D. Eisenhower, *Mandate for Change, 1953-1956* (Garden City, NY: Doubleday & Company, 1963), 380-1.

<sup>14</sup> *Ibid.*, 378-9.

<sup>15</sup> For Eisenhower’s views on the Dixon-Yates scandal, see Eisenhower, *Mandate for Change*, 378-85. The best account from TVA’s perspective is Owen’s *The Tennessee Valley Authority*, 102-11.

With the encouragement of the federal government, two regional power providers offered their services: Middle South Utilities, chaired by Edgar H. Dixon, and Southern Company, headed by Eugene Yates. Dixon and Yates formed the Mississippi Valley Generating Company and began negotiations on a contract for construction and operation of a generation plant to be built across the Mississippi River from Memphis in Arkansas. The new company, usually referred to as “Dixon-Yates,” would construct a power line with TVA, which would purchase the power and distribute it to the defense plant at Paducah. Dixon-Yates would have insurance against the vagaries of federal funding, since TVA would buy a set amount of power regardless of need, and Eisenhower would gain the satisfaction of knowing that the federal government would not have to increase the Authority’s appropriations. The Dixon-Yates contract placed the “political football” of power squarely in the hands of the Republican administration.<sup>16</sup>

Alabama’s congressional delegation quickly came to TVA’s defense. Bob Jones asked Attorney General Herbert Brownell, Jr., to investigate the legality of an AEC-utility contract; Jones’s own research suggested that AEC could only supplement TVA power, not replace it.<sup>17</sup> Lister Hill reassured his constituents that he was doing all he could to stop the Eisenhower administration in its attempt to “destroy TVA and our public power policy.”<sup>18</sup> Hill, in particular, played an important role in combating the proposed contract. The Alabama senator began a close scrutiny of the administration’s role in promoting the Dixon-Yates contract and found that a temporary consultant to the Bureau of the Budget named Adolphe Wenzell was, at the time, also employed by the First Boston Corporation, which had financed the Dixon-Yates project.

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<sup>16</sup> Owen, *The Tennessee Valley Authority*, 106; Eisenhower, *Mandate for Change*, 376.

<sup>17</sup> Jones to Brownell, Jr., 13 July 1954, 152: 2535, Bob Jones Papers, UAH.

<sup>18</sup> Hill to Louis A. Eckl, 21 July 1954, 272: 54, Hill Papers, Hoole. Hill’s papers, particularly folders 54 and 55, contain numerous telegrams from across the Valley calling for action against the Dixon-Yates contract.

Eisenhower charged that the Wenzell connection was a “regrettable error” and a “diversion from the main issue,” but the evidence supported claims that Republicans were conducting an underhanded battle to halt TVA’s progress.<sup>19</sup> The Dixon-Yates contract also spurred local action. A group of concerned Valley residents formed the “Citizens for TVA, Incorporated,” a nonprofit organization designed to “maintain a strong and effective TVA” and to create a central organizing body for the defense of the Authority. John Sparkman praised President George Dempster and the Citizens for their “outstanding and productive” work, and encouraged a publicity campaign to boost the morale of the area.<sup>20</sup>

Such local support for the Authority was crucial to its campaign against Dixon-Yates. As TVA historian Marguerite Owen notes, the Board did little to contest Eisenhower’s claims. The agency grumbled, but its directors largely feared that any outburst would result in retaliation by the administration. These fears were realized later that year, when Chairman Gordon Clapp’s seat on the board expired. Clapp had been with the Authority from 1933, ascending from Director of Personnel to General Manager and finally to the chairmanship when David Lilienthal resigned to join the AEC. Eisenhower refused to renominate Clapp and instead replaced him with Brigadier General Herbert D. Vogel, recently retired from the Army Corps of Engineers. Eisenhower hoped that Vogel would ease the passage of Dixon-Yates by forcing TVA’s cooperation. The president’s plan worked; TVA agreed to accept the energy produced at the

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<sup>19</sup> Eisenhower, *Mandate for Change*, 382-4.

<sup>20</sup> Dempster to Sparkman, 26 November 1954; and Sparkman to Dempster, 29 November 1954, 207: “26, TVA,” Sparkman Senate Papers, Hoole. Dempster also worked to dispel the myth that the Valley stole industry from New England, producing a pamphlet that used statistical evidence to show that only ten of the 1,600 manufacturing plants that had located in the area since 1933 came from the Northeast. See *ibid.*; and Joseph Marshall to Tennessee Valley Congressmen and Senators, 29 May 1956, 273: 79, Hill Papers, Hoole.

Dixon-Yates plant, and the utility held a celebration with an elaborate groundbreaking ceremony and a victory parade.<sup>21</sup>

The party proved hasty. Hill's revelation of the intrigue between the Bureau of the Budget and Dixon-Yates caused many to take a second look at the government contract, including Memphis's municipal leadership. When TVA's contract with Memphis expired in 1955, city officials decided not to renew the agreement, opting instead to build a municipal plant. Without the growing urban area on its network, TVA was able to meet demand. The yet-to-be-built Dixon-Yates plant was no longer needed, and the White House cancelled the contract.<sup>22</sup> Neither party could claim a real victory, though both tried. Eisenhower noted that in building an independent plant, Memphis followed his prescription for allowing natural resource development to occur at the local level, and with local initiative. Edgar Dixon and Eugene Yates sued the federal government for the cancelled contract and eventually won \$1.9 million in damages, a decision Eisenhower felt "right." He concluded in his memoir that "[the] government has the power to help human beings in need. It has also the responsibility to stimulate people to exercise initiative on their own behalf."<sup>23</sup> In his eyes, at least, Dixon-Yates inspired Memphis to do just that.

Ironically, TVA had the same goal. However, the president's actions had roused the Valley to action and earned the ire of southern Democrats, determined to protect the Authority's role in regional development. "Mr. TVA" perhaps best enunciated the anger at Eisenhower's actions: "[Dixon-Yates] is a shameful story of greed and venality. It is a story of cunning speculators with a bold plan to obtain a 'fast buck' while acting in total disregard for the public

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<sup>21</sup> Owen, *The Tennessee Valley Authority*, 109-10.

<sup>22</sup> *Ibid.*, 111-4; and Eisenhower, *Mandate for Change*, 384.

<sup>23</sup> Eisenhower, *Mandate for Change*, 384, 394.

interest.”<sup>24</sup> Yet TVA could not claim victory, despite the cancellation of the contract. The scandal, coming as it did on the heels of congressional attempts to limit the agency’s appropriations, demonstrated the changing climate for federal funding. The Authority could no longer assume that the government would provide for increasing demand. As the Valley used more and more electricity, domestically and industrially, TVA had to find a new way to meet its needs. By the mid-1950s, its legislative supporters were planning for a future in which TVA could fund itself.

A hostile administration was not the Authority’s only concern in the postwar years. As the agency’s leadership defended its financial existence, the Board also faced challenges to established policies that seemed increasingly out-of-date in the changing national climate. Long concerned about the intelligent use of resources, growing environmental concerns forced the Authority to reconsider its stance on pollution, particularly in the recreational waters that had become an important part of its economic development program. TVA also faced challenges to its labor policies. Arthur Morgan had praised the forward-looking nature of TVA’s agreement with labor unions, encouraging cooperation, collective bargaining, and negotiated arbitration, and well into the 1940s, the lack of overt labor strife seemed to prove him right. In the 1950s, however, workers began to push for greater autonomy, forcing TVA to reconsider its union policy. Finally, the Authority’s racial inclusion policy proved inadequate when judged beside the rising tide of civil rights protest across the country. Up to the 1940s, TVA had encouraged proportionate employment in its offices and facilities, but had largely held to the segregationist culture of the areas it served. As African-Americans began challenging Jim Crow in earnest, TVA’s policies failed to stand up to scrutiny, and the agency’s leaders defended their programs even as they sought to maintain racial stability across the Valley. By 1960, TVA had changed

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<sup>24</sup> Qtd. in Eckl, *Story of an Alabama Congressman*, 15.

old policies to meet new demands. Yet that transformation was limited, and as events demonstrated, the postwar TVA preferred economic prosperity to social progress.

For an agency that demanded such drastic physical change, TVA evinced surprisingly little environmental concern from Valley residents through World War II. This was partly due to the nature of the Authority's program, which introduced forestry, erosion protection, and resource protection to the region, addressing the most egregious environmental problems of the Depression-era South. Residents were also wary to challenge the program bringing jobs and income to their communities. The depression and the wartime emergency gave little opportunity for criticism from those benefitting from TVA's actions. By 1945, however, the end of the war combined with a growing concern among the Authority's leaders for the consequences of industrial development to draw attention to pollution in the Valley. That year, TVA's Health and Safety Department released a detailed study of pollution in the Tennessee River system, thanks in part to pressure from state health departments. The report highlighted the rudimentary nature of water treatment in the region: only 120,400 people in the entire Valley had their sewage treated, less than 20% of the total population. The region's extractive industries made the situation worse. Pulp and paper mills, textile mills, and cellulose plants dumped waste into the Valley's streams and rivers, and the wartime metals and chemicals industries almost doubled prewar pollution levels.<sup>25</sup> When industries began to recover during the postwar years, the agency's engineers posited that "an increase [in pollution] will result with the unfolding of anticipated expansion."<sup>26</sup> In a nod to the increasing importance of recreation in the Authority's program for economic development, researchers concluded that pollution would have its largest

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<sup>25</sup> G.R. Scott and S.L. Jones, *Studies of the Pollution of the Tennessee River System, II: Detailed Discussion of Types and Sources of Pollution and Their Effects on the River System with Results of Studies of the Major Tributaries, 1937-1939* (TVA, 1945), 2, 5-7, 9-10, 142; loose, Pope-Paty Papers, TVA Records, NARASE.

<sup>26</sup> *Ibid.*, 11.

impact on tourism on Valley lakes. Boating might continue to prosper “if the aesthetic requirements can be overlooked” but swimming and fishing would be seriously reduced by contaminated water, limiting broad-range recreation facilities.<sup>27</sup> Pollution had become both a consequence of economic progress and a serious impediment to continued growth.

By the 1950s, little had been done to solve the growing problem. The *Huntsville Times* reported that pollution in the Tennessee River continued to increase, up 35% from 1941 with little action from Alabama’s state or city governments. No Alabama cities topped the list of the Valley’s biggest problem areas (all were in Tennessee, Virginia, and North Carolina), but the region faced a worsening problem.<sup>28</sup> TVA was not blameless. One resident wrote Bob Jones complaining that TVA “turned a lot of phosphorous loose into the Tenn [sic] River killing thousands of pounds of fish.” Soon afterwards, the agency’s nitrate plant “loosed another chemical into the river that has come through our water system into our homes which has a bad odor and is making people sick.” Jones contacted the Authority, which made a careful investigation into the incidents. General Manager John Oliver admitted that the first release occurred when “elemental phosphorous originating from an undetected source in the TVA chemical plant” created a “large” fish kill in the upper end of Pickwick Lake. The second incident came from a release of diphenyl oxide, or “Dowtherm,” from the Army’s Phosphate Development Works into Pond Creek. Oliver promised that TVA would work closely with the Army to prevent further spillage, but hastened to add that the agency was not responsible for the

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<sup>27</sup> *Ibid.*, 14.

<sup>28</sup> “Tennessee River Pollution Worse,” *Huntsville Times*, 22 January 1953, 16.

second release.<sup>29</sup> Oliver's refusal to assume responsibility for the pollution of area streams was a telling example of the Authority's desire for development over conservation.

As late as 1967, pollution remained a concern for Valley residents. In a talk with the Decatur Kiwanis Club, Bob Jones admitted as much, linking concern for the region's natural resources with its economic future. He told assembled community leaders to join him in "safeguarding the water quality of our fine lakes and streams as we successfully court industrial expansion, develop our towns and cities, and make greater and greater demands on our existing water supply."<sup>30</sup> He praised action by the government, the public, and even some industries to call attention to the importance of environmental awareness, but noted that the Tennessee Valley faced an impending crisis. As the regional economy continued its trend towards industrialization and urbanization, pollution would climb to more dangerous levels. With industry "knock[ing] on our door" and increases in disposable income allowing Americans to "boat and fish and to build homes on the lakeshores," the Valley needed a "well-ordered and closely supervised" partnership between the public and industry to maintain the region's natural wealth.<sup>31</sup> He concluded with an appeal to TVA to become a "watchdog," cleaning Valley waters and creating a plan to help both the public and industry prepare for conservation.<sup>32</sup> Jones's concerns signified just how little TVA did to combat pollution in the Valley. Despite tentative steps to recognize the extent of water and air pollution, the agency preferred industrial operation to conservation, only concentrating on the problem when it affected the recreational resources that brought tourist

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<sup>29</sup> R.A. Haden to Bob Jones, 3 November 1953; and Oliver to Jones, 21 November 1953, 152: 2529, Bob Jones Papers, UAH.

<sup>30</sup> Jones, "Remarks of Rep. Bob Jones to the Kiwanis Club of Decatur, Alabama," 30 November 1967, 1-2, 138: 2325, Bob Jones Papers, UAH.

<sup>31</sup> *Ibid.*, 2-4.

<sup>32</sup> *Ibid.*, 4-5.

money to the Valley. Without a more comprehensive plan for environmental protection, the agency faced a serious problem that could limit, or even retard economic development.

Unlike pollution control, labor always held an important place in TVA's vision for the Valley as a model for incoming industries. By the end of World War II, the labor policies set up by Arthur Morgan and David Lilienthal seemed successful; TVA had experienced no major work stoppages, and a 1948 report by the University of Chicago's Committee on Human Relations in Industry praised the agency's policies as proof that "patient and clear-sighted men can construct the sort of human relations structure they believe in."<sup>33</sup> The report noted that by setting up a series of contact points for wage, hour, and conditions negotiations, the Authority had become an example for other southern industries. The agency also created an ideology of cooperation that extended beyond labor-management interaction. Researchers discovered that the Authority's workers felt like an essential part of TVA's mission of change. As one employee told a committee investigator, "I've walked out here in the south when there were laws on the books against it, but striking against TVA would be like striking against ourselves." The report concluded that "TVA approximates the ideal concept of union-management cooperation."<sup>34</sup> TVA seemingly realized its founders' vision by creating a system of labor-management cooperation that exhibited the possibilities inherent in the southern workplace – the Authority was a "yardstick" for industrial labor organization.

By 1950, however, labor unrest began to expose shortcomings in the vaunted "Agreement." In designating the Tennessee Valley Trades and Labor Council as the "official" union for laborers, TVA severely limited worker's organizational choices. The Agreement made

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<sup>33</sup> Orvis Collins, "Industrial Democracy on the TVA – the Authority and the Council: A Pilot Report," 26 February 1948, 2, 72: "254.1 Union Management Cooperative Plans, R.R. Paty and J.P. Pope, 1948-49," Pope-Paty Papers, TVA Records, NARASE.

<sup>34</sup> *Ibid.*, 12-3.

communication and negotiation easy since TVA's leaders always knew whom to contact when conflict arose, but workers who felt misrepresented had little recourse. In 1951, a group of workers from the International Association of Machinists (IAM) complained that TVA asked them to join a Council affiliate. According to representatives, workers who refused were told that they would be fired. As the complaint noted, the central problem was job loss. The Authority had terminated some machinist jobs and began to assign emergency repairs to engineers, even though some of the tasks required machinist-specific skills. The IAM members were not only forced to switch affiliations, but they also watched as the Council supported the transfer of skilled positions from machinists to those less capable. The workers threatened to take steps to "rectify the injustice," a thinly veiled reference to striking.<sup>35</sup> Authority officials denied the charges, standing by their agreement with the Council. A month later, the Director of Personnel, Harry L. Case, issued a general notice to all employees stressing TVA's belief in "democratic labor relations" and reminding workers of the well established channels for complaints. The Agreement left "no jurisdiction" for work stoppages, and since TVA was a government agency, strikes were illegal on its projects.<sup>36</sup> The pronouncement belied the Authority's pro-labor stance. Case made clear TVA's willingness to prosecute any workers who refused to follow the channels agreed upon by the Council and Authority.

In September 1951, the machinists struck, setting up picket lines at Boone Dam in Tennessee. They hoped the other craft unions would support their cause, but they were proved wrong. The Council ordered its unions to cross the line, undermining the machinists' actions.

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<sup>35</sup> A.J. Hayes, President, International Association of Machinists, to General Manager John Oliver and Director of Personnel Harry L. Case, 17 June 1951, 210: "1404 Strikes and Strikebreakers," Pope-Paty Papers, TVA Records, NARASE.

<sup>36</sup> Oliver to Hayes, 26 July 1951, *ibid.*; and Case, "Notice to All Employees," 17 July 1951, 210: "1404 Strikers and Strike Breakers," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

The disgruntled workers extended their protest to Hales Bar, Chickamauga, Chattanooga, and Widows Creek, but again, Council laborers broke the picket lines, rendering the machinists' protests moot. In the end, TVA claimed victory, insisting that the strikes were an illegal act and that the Authority had always enjoyed good relations with its workers.<sup>37</sup> Throughout the 1950s, TVA continued to stress its willingness to help workers better their careers, thus improving the agency as a whole. As Chairman Clapp noted, "What we have emphasized is giving employees responsibility." He pointed to the decentralized supervision that allowed employees to oversee many of their own projects. He praised the fluid promotion lines that created a large pool of increasingly skilled workers, and thus, a standing cohort of potential employees.<sup>38</sup> Yet as the machinists' strike indicated, TVA's support for the workforce was limited to its own prescription for labor in the Valley. Workers had the right to organize, but only to create a more efficient workforce. When disputes threatened to close projects needed to improve the Valley and power homes and businesses, TVA's needs came first. In that respect, the Authority was not so different from other southern industries.

The challenge to TVA labor policies in the 1950s was a definite change from the relative tranquility of the 1930s and 1940s. The same could not be said for its racial policies, which had been regularly questioned by the Valley's African American population. Just as the Authority's leaders praised the agency's labor relations as a much needed example for southern employee management, they also pointed to its stance towards African American employees as beneficial and instructive. Neither Arthur Morgan nor David Lilienthal sought to overturn segregation, but

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<sup>37</sup> TVA, "Statement of TVA Concerning Machinists' Picket Lines," 14 September 1951, 210: "1404 Strikes and Strikebreakers," Pope-Paty Papers, TVA Records, NARASE.

<sup>38</sup> Clapp to Edward H. Rees, Chairman, Committee on Post Office and Civil Service, 24 November 1953; and Personnel Division, "Promotion Policy and Methods and Programs of Supervisory Training and Selection in the Tennessee Valley Authority," November 1953, 92: "032.03 Congressional Committees and Reports on, 1951-1960," Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

from the outset, the Authority determined to hire black employees in proportion to local population. The Board called for hiring and promotion based on merit and efficiency in the 1930s, when race-based employment was the overwhelming norm across the region. Yet from the outset, black workers challenged the inadequacy of the proportion rule in addressing inequality across the region. When confronted with white protests, TVA moved to mollify white residents by removing blacks from “threatening” positions as guards. Black workers participated in training programs designed particularly for their community, but the Authority struggled to hire skilled workers in proportion to the black population. TVA tried to include African Americans in its recreation programs, but only by creating separate facilities for the black community. Acquiescing in southern segregation, the agency failed to truly challenge the system. By the 1950s, black protest showed no signs of weakening, especially as the African American community began calling for truly equal treatment.

Franklin Roosevelt’s Executive Order 9980 challenged race-based hiring practices in the South, but TVA prided itself in equal employment, pointing to the “merit and efficiency” clause of its employment guide. The agency informed its workers of the provisions of EO 9980 through posters, pamphlets, and group meetings, even instructing supervisors and managers on how to handle complaints.<sup>39</sup> Publicity was enough for the Board, but black leaders in the Valley saw things differently. Humphrey May, a representative of the Cement Mason’s Local 826 called for an investigation into TVA’s unfair employment practices towards black workers. Despite a legacy of skilled labor stretching back to Reconstruction, May noted, black laborers had become the victims of discriminatory employment, thanks largely to the recognition of unions that refused to allow black members. When TVA looked to the Council for workers to employ on

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<sup>39</sup> Gordon Clapp to James L. Houghteling, Chairman, Fair Employment Board, 29 November 1950, 127: “210.14 Hire of Employees thru 1950,” Curtis-Morgan-Morgan Papers, TVA Records, NARASE.

projects, the lack of black union members meant that only whites received skilled jobs. Soon, May argued, skilled work would become completely synonymous with “white” work.<sup>40</sup>

TVA responded as it always had, emphasizing the provisions of its “merit and efficiency” clause. According to Clapp, May’s allegations failed to take into account TVA’s open register system, allowing an applicant to request any job. The chairman pointed to African American journeymen carpenters and linemen, labor foremen, and “helpers” in skilled crafts. Despite noting the problem of finding blacks with the experience or skills needed for trades labor, he assured the federal officials that TVA was doing all it could to train and employ skilled blacks for the agency’s jobs.<sup>41</sup>

A greater challenge to TVA came in 1957 when a federal court decision struck down the segregated operation of public parks. The agency, which worked closely with state and local governments in preparing recreational facilities before leaving area leaders in control, had invested time and money in a dual system of parks. The ruling gave TVA cause for introspection. General Manager (and future Board member) Aubrey J. Wagner asked J. Ed Campbell, the Director of Reservoir Properties, for recommendations on a response by the Authority. Campbell noted TVA’s dedication to equal access to reservoirs (through segregated facilities) well before 1954. However, he feared that the legislation would result in a number of park closings, leading to a severe restriction on public access and a serious blow to TVA’s recreational income. With public attitudes “still in the process of change,” Campbell foresaw the “likelihood of closure” for parks along Alabama’s reservoirs.<sup>42</sup> Yet he remained optimistic. As

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<sup>40</sup> May to H. Alexander Smith, Chairman of Committee on Labor and Public Welfare, 23 November 1953, 68: “210.2221 Negroes or Colored,” Pope-Paty Papers, TVA Records, NARASE.

<sup>41</sup> Clapp to Roy E. Jones, Staff Director, Committee on Labor and Public Welfare, 21 December 1953, *ibid.*

<sup>42</sup> Campbell to Wagner, 24 April 1957, 2-3, 9, in *ibid.*

long as TVA maintained a minimum number of open parks, the Authority might “exert leadership toward resolving the basic issues involved.” Campbell argued that, as a leaseholder, TVA should demand that upon signing a lease or renewal, the prospective operator agree to a policy of integration.<sup>43</sup> Wagner and the Board approved the recommendations. The Board failed to take serious action to resolve inequality in hiring practices on its own, but by 1960, the Board tentatively moved to provide equal access to the Valley’s recreational facilities. The agency’s role as a “leader” in race relations was questionable at best. Operating in cooperation with state and local governments and organizations predicated on segregation, the Authority again compromised its idealistic views. No longer able to act as a “yardstick” in racial equality or labor-management relations, TVA’s leadership resigned itself to economic advancement and moderate social change. Any more would endanger the thousands of jobs pouring into the region.

The 1950s certainly challenged TVA’s development work in the Tennessee Valley. Labor and racial strife highlighted the inconsistent nature of the agency’s claims of betterment and a hostile Republican administration sought to curb spending and limit the expansion of the Authority’s generating capabilities. The Board, its congressional supporters, and the people of the Valley found themselves on the defensive, even as they sought to boost the regional economy through industrial growth. Industries came to the Valley for cheap power, cheap labor, and numerous financial incentives. Yet TVA could point to more fundamental successes that boded well for the Valley’s future. Civic leaders across the region, particularly Decatur’s Barrett Shelton, embraced the Authority’s suggestions for local economic development, and the birth of regional development groups like North Alabama Associates provided a foundation for

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<sup>43</sup> *Ibid.*, 12.

cooperation and coordination among the business interests of the Valley. By 1960, two accomplishments proved TVA's ability to weather the decade's storms: the Self-Financing Bill and the Tributary Area Development Program. The programs did more than culminate years of struggle – they cemented the transition begun by David Lilienthal in the late 1930s. TVA spurred economic growth by encouraging local groups to act in their own interest by creating industrial jobs. The benefits accrued back to TVA in the form of power profits, which allowed for further growth expansion. By the mid 1960s, the Authority had become a government agency whose economic development programs were nearly indistinguishable from those of its private power colleagues.

As a concept, self-financing tantalized TVA's leaders. During the original debate over the Authority in the 1930s, some proponents demanded that the agency be allowed to use its revenue from power sales to fund the expansion of generating capability. For fiscal conservatives, this provided a means for the Authority to fund its own growth without placing a burden on the government's treasury. For New Deal liberals, a self-financed TVA would be encouraged to extend its benefits to as many as possible, since more customers translated to larger profit margins. In these early debates, however, arguments against such legislation proved stronger. Opponents feared that without the right to approve government appropriations, Congress would be unable to check the agency. For two decades, TVA submitted its proposed budgetary needs to Congress, which debated the merits of the request before doling out funds to the agency. During the 1930s and 1940s, this proved little more than a nuisance. Granted, the Authority's congressional opponents, particularly Tennessee's Kenneth McKellar, used appropriations fights to challenge aspects of its program they found distasteful, but New Deal majorities ensured that for the most part, funds were available when needed. By the 1950s,

however, the fights became particularly difficult. The New Deal coalition had collapsed, and the wartime emergency had ended. The Eisenhower administration and a divided Congress proved much more hostile to TVA's plans. Again challenged, TVA's proponents began to revisit the idea of self-financing.

In 1955, the Citizens for TVA, a locally formed group dedicated to fighting for the Authority, presented "Sources of Capital for the TVA Power System" with the assistance of the TVA Board, detailing the Authority's need to fund itself. By 1957, half of TVA's annual output would go to federal defense agencies. Any failure to provide electricity would be a detriment to national security, not to mention a blow to the agency's many domestic and business customers. TVA needed the authority to build when necessitated by demand for electricity, regardless of the political tilt of Congress. The report concluded with a proposed amendment to the TVA Act that authorized the agency to issue bonds secured by its own revenues.<sup>44</sup> Such a plan would push the Authority much closer to operating as a private industry, but would also provide the kind of financial security that would insulate the agency from the vagaries of congressional majority. The Dixon-Yates controversy heightened the resolve of self-financing proponents. In 1956, the Authority's supporters in the government, led by Alabama's Bob Jones, began forcefully calling for legislation that would make TVA independent of federal appropriations.

In March 1956, as Congress debated a cut in TVA appropriations, Jones used the opportunity to raise the issue of self-financing. He asked his fellow legislators to recognize that "industrial development and economic growth in the Tennessee Valley should not be treated any differently than industrial development and economic growth in the other regions of the United

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<sup>44</sup> William L. Sturdevant, Jr., to Folsom, 7 June 1955, SG13857: 12, James E. Folsom Administration (1955-59) (Second Folsom Administration Papers), ADAH.

States.”<sup>45</sup> While Valley companies brought a new way of life to residents, the accompanying prosperity placed demands on TVA’s power resources. Cuts in TVA’s appropriations meant capping growth and telling industry to locate elsewhere. As he noted, “Surely the Congress will act responsibly, and accept this opportunity to support an agency of its own creation and without a cent of appropriation being necessary.”<sup>46</sup>

Jones introduced a bill giving TVA the power to issue revenue bonds to “provide the additions to power capacity required to keep up with the growing load of the area it serves,” backed by “a record of good management which gives assurance of revenues in the future as in the past.”<sup>47</sup> The legislation allowed the public to invest in TVA, just as it could in any private company. He pointed to the agency’s legacy of success from its early construction program to its participation in the defense effort – a veritable investment pitch – and found support across the Valley. Louis Eckl, the editor of the *Florence Times* and a representative of the Associated Tennessee Valley Chambers of Commerce, called for “sound and workable legislation” allowing TVA to finance its own expansion. In response to comments from the U.S. Chamber of Commerce describing TVA’s threat to private power, Eckl noted that bond legislation would allow the Authority to continue providing the power needed by private industry in the Valley to expand.<sup>48</sup> The Valley chambers massed in support of Jones’s legislation.<sup>49</sup>

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<sup>45</sup> Clipping, Jones, *Congressional Record* (House), 20 March 1956, 4614, 213: 3296, Bob Jones Papers, UAH.

<sup>46</sup> *Ibid.*, 4615.

<sup>47</sup> “Statement of Hon. Robert E. Jones, Representative of Eighth District, Alabama, Opening the Hearings on TVA Financing Bill,” [ca. 1957], 1, 148: 2467, Bob Jones Papers, UAH.

<sup>48</sup> Eckl, Untitled Statement, [ca. March/April 1957], 1-2, 215: 3322, Bob Jones Papers, UAH.

<sup>49</sup> See for instance, C.H. Jackson, Manager, Florence Chamber of Commerce, to Jones, 13 May 1957; and Jimmy Walker, Secretary-Manager, Huntsville Chamber of Commerce, to Jones, 21 May 1957, 148: 2466, Bob Jones Papers, UAH.

The opposition of the U.S. Chamber became a rallying point for private utilities, which were afraid that self-financing removed the one roadblock to TVA's complete dominance of the Southeast. Jones noted as much in a 1958 speech, citing the "hostility" of private utilities seeking to "erect an insulating wall around the TVA." Jones instructed his constituents to "be up in arms," since a private power victory would allow for higher rates, poorer service, and a lack of industrial clients.<sup>50</sup> Once again, Alabama Power proved a scapegoat, and the company was denounced as "a principal in a vicious and concentrated attack against TVA" in hearings on the bill. The utility's parent, Southern Company, called the Authority a "socialistic monster" seeking to expand public power at the expense of private utilities. Jones responded that bond issues were an important financial tool in a free enterprise system.<sup>51</sup>

The debate again highlighted TVA's amorphous position as both a public and private agency. From its beginnings, the Authority was both an arm of the federal government, charged with transforming the social economy of the Tennessee Valley, and a private industry, producing and distributing power at a small profit to the federal government. When Southern Company called TVA "socialistic" and the U.S. Chamber of Commerce denigrated the agency's favored position, both recalled the public nature of TVA, a federal agency using its position to expand. Yet Jones and the Valley chambers preferred to see the Authority as a private entity, a belief that helped them make the case for a financing system based on private enterprise. TVA encouraged industrial growth in the Valley largely through power sales and cooperation with local businessmen. Allowed to grow freely, the agency would undoubtedly continue to provide benefits to the companies located in the South and elsewhere.

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<sup>50</sup> Jones, Untitled Speech, [ca. 1958], 148: 2471, Bob Jones Papers, UAH.

<sup>51</sup> "Rep. Jones Raps Utility Attack upon TVA Bill," *Huntsville Times*, 31 July 1958, 1, 2.

The House Public Works Committee approved the bill, but in the Rules Committee, Virginia's Howard Smith refused to allow the plan to reach the floor.<sup>52</sup> Jones, the “spark plug” behind the bill, reintroduced his legislation during the next session with guarantees that TVA would not encroach on new territory (particularly that of Alabama Power). John Sparkman pushed the plan through the Senate, noting its benefit for Alabama's “great industrial development.”<sup>53</sup> In July 1959, the Senate passed the self-finance bill, sending it to a joint committee that would draft the final version. Despite private power's “measure of success” in getting a limit placed on territorial expansion, the legislation proved a victory for the forces of TVA.<sup>54</sup> The Board no longer had to rely on Congress to obtain funds for new plants or more lines. For the Valley's representatives and business leaders, the self-financing legislation meant freedom from the annual lobbying and debating that accompanied appropriations fights. For the residents of TVA's service area, the success heralded continued economic expansion. Even Eisenhower noted the victory. In his memoirs, he recalled signing the self-financing bill into law, making the Authority more “businesslike.” Content that the agency had set boundaries, he allowed it the opportunity to “stimulate people to exercise initiative on their own behalf,” something TVA had tried to accomplish all along.<sup>55</sup>

The self-financing bill was an important milestone for TVA, marking a definite break from its New Deal past. The Authority remained an arm of the federal government, but its public status belied a full-fledged entrance into the private domain. Even as TVA looked more

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<sup>52</sup> “TVA Self-Finance Plan Given Okay,” *Huntsville Times*, 30 July 1958, 1; “Self-Finance TVA Program Chance Goes,” *Huntsville Times*, 6 August 1958; and J. Wiley Bowers, Executive Secretary, Tennessee Valley Public Power Association, to Eckl, 18 August 1958, 148: 2465, Bob Jones Papers, UAH.

<sup>53</sup> Sparkman to Robert S. Gellerstedt, 22 May 1959, 333: “Fed. Gov. 1-2, TVA,” Sparkman Senate Papers, Hoole.

<sup>54</sup> Gordon Brown, “TVA Self-Finance Plan Given Senate Okay,” *Huntsville Times*, 10 July 1959, 1.

<sup>55</sup> Eisenhower, *Mandate for Change*, 385, 394.

and more “businesslike,” however, it held one distinct advantage over utilities like Alabama Power – as a government agency, it could still operate on much thinner profit margins than private utilities. This provided TVA with the ability to charge reduced power rates, creating the much maligned electric “yardstick.” Federal authority also allowed the agency to work in poorer “depressed” areas. Despite its rapid growth, the Valley continued to boast a number of underdeveloped communities. The Authority could afford to fund long-term electrification and industrialization programs in these areas, where returns on the investment might be decades in the making. This truth lay at the heart of the Tributary Area Development Program (TAD). On the surface, TAD seemed a return to the original idealism of the early TVA. In reality, the program sought to encourage isolated communities to embrace the same type of growth that had occurred in places like Decatur and Florence. Empowering communities that lagged behind their larger neighbors, the Authority sought to expand economic development to every community in the Valley. TAD illustrated the successes and failures of TVA’s program for the Valley, and marked another fulfillment of Lilienthal’s vision of the future, as well as a fulfillment of the path to development that citizens promoted throughout the agency’s existence.

In her history of TVA, Marguerite Owen situated the beginning of the Tributary Area Development Program in 1950 in the Beech River watershed of west central Tennessee, 65 miles northwest of Florence. Community leaders contacted the TVA Board, asking for assistance dredging the river and clearing the channel connecting their community to the Tennessee River. TVA’s leaders sensed an opportunity to turn their attention to this often-ignored area and encouraged civic organizations to think more broadly and plan for the “total resource development” of the Beech River region.<sup>56</sup> The Eisenhower administration’s demands for governmental economy challenged the existence of the fledgling program, but by the late 1950s,

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<sup>56</sup> Owen, *The Tennessee Valley Authority*, 123.

citizens had sponsored a new courthouse in nearby Lexington, controlled erosion with new pastures and tree plantings, and attracted several small industrial plants employing 2,300 local residents. The success at Beech River suggested that smaller communities across the Valley could “promote economic well-being” and become “pleasanter places to live in” by creating their own Tributary Area Development associations.<sup>57</sup> By the late 1950s, Beech River was joined by a number of other “depressed” communities looking to improve their economy in conjunction with TVA.

In 1959, TVA’s Walter L. Criley met with mayors and other county and city officials from various communities in northern Alabama and southern Tennessee. The group had recently formed the Elk River Development Association (ERDA) and vowed to work for navigation, flood control, dam construction, and industrial and recreational development on the tributary – in essence, a miniature TVA. Criley encouraged the assembled delegation, calling for local initiative on projects such as industrial site analyses and recreation surveys.<sup>58</sup> TVA officials were encouraged by the meeting. TVA Board member Brook Hays praised the group’s “voluntary, non-government collaboration.”<sup>59</sup> In his opinion, the ERDA proved that, given the opportunity, local leaders would work to better their community. TVA served as an overall coordinator and fact-finding entity, allowing local groups to propose their own strategies for economic growth. Just as the Authority encouraged Valley chambers of commerce and groups like NAA, the ERDA became the face of TVA’s efforts in smaller communities along the Elk River. The leaders of the ERDA looked to the Authority for assistance, but the relationship did

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<sup>57</sup> *Ibid.*, 123-5.

<sup>58</sup> Criley, Minutes of Elk River Development Association Meeting, 20 May 1959, 39: “220 Elk River, 1958-1961,” ECD Papers, TVA Records, NARASE.

<sup>59</sup> Weldon Payne, “Tennessee Valley Area Bands to Boost Growth,” *Huntsville Times*, 3 February 1960, 1; and Clayton Braddock, “TVA Leader Surveys Area of Elk River,” *Huntsville Times*, 1, 2.

not always tend towards cooperation. Instead, by 1961, the group began enunciating a very different vision of growth than that promoted by TVA. The disagreements between the ERDA and TVA highlight the extent of the Authority's transformation and the entrenched industrial mindset that drove its actions.

In early 1961, ERDA President Joe Sir complained about TVA Chairman Herbert T. Vogel's intransigence to his senator, Lister Hill. Sir wanted to build a dam and reservoir on the Elk River, improving navigation and flood control. Vogel had other ideas. He told Hill that Sir "failed to understand fully TVA's position and objectives." He used Beech River as an example – the region had nine new industries, including 1,500 new jobs in forestry and timber industries alone. With TVA's help, the same progress could be made in the Elk River watershed.<sup>60</sup> As he related to Sir, no "sound economic justification" existed for navigation dams (in itself, a telling statement). Vogel told Sir that the "abilities and enthusiasm" of the ERDA could be better directed towards a comprehensive plan that included plans for recreational facilities and industrial development that took advantage of the human and natural resources available in the area. In his response, Sir clarified this "difference in approach." The ERDA shared the Authority's desire for "an integrated effort for economic growth," and river control was simply the group's first concern in the long-term development of the area.<sup>61</sup> Where Vogel envisioned a program to inject direct benefits through employment and income creation, Sir wanted a much broader development that would create the foundation for future growth – much like the earliest land use programs of Arthur Morgan's TVA. By 1960, the Authority could no longer countenance full scale river development unless the returns could justify the investment.

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<sup>60</sup> Vogel to Hill, 14 February 1961, 129: 2175, Bob Jones Papers, UAH.

<sup>61</sup> Vogel to Sir, 3 April 1961; and Sir to Vogel, 17 April 1961, 39: "220 Elk River, 1958-1961," ECD Papers, TVA Records, NARASE.

In the end, Sir acquiesced. The next year, ERDA and TVA's Water Control Planning Division studied the water supply in the Elk River Basin, proposing a "single, large 'wet' industry" such as a paper mill to increase the industrial presence in the area. The next month, ERDA produced a report on regional employment and income status, detailing underemployment on local farms and calling for "increased personal income" and the use of local raw materials. The group planned to meet with TVA to decide the "major direction" of its industrial development activities.<sup>62</sup> In 1964, the ERDA and TVA began planning for a tributary area training program, to help local families with little income or schooling prepare for jobs in the "large employers of labor" that TVA would assist the local organization attract business.<sup>63</sup> Dependent on the Authority for assistance in obtaining federal funds, accessing studies and surveys of the region, and planning for future growth, the ERDA resigned itself to preparing for industrial growth without broader river development. When given the opportunity to encourage a return to the kind of revitalization first envisioned in the New Deal, TVA decided instead to call for jobs and income, a decision three decades in the making.

The Tennessee Valley Authority impacted every aspect of life in the Southeast. The construction of dams and reservoirs on the Tennessee River and its major tributaries drastically reduced the annual flooding of the Valley, created a navigable channel that allowed farmers and businessmen access to the rest of the world, and provided a source of cheap hydroelectric power. Fertilizer research and production at Muscle Shoals combined with the Authority's educational programs to help farmers diversify their crops and protect their fields from erosion.

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<sup>62</sup> Water Control Planning Division, "Water Supply and Use in the Elk River Basin," February 1962, 3; and ERDA Business and Industry Committee, "Preliminary Report," March 1962, 14, 15, 39; "220 Elk River, Jan.-Feb. 1962," ECD Papers, TVA Records, NARASE.

<sup>63</sup> Wendell Russell, "Meeting on Training Project Possibilities: Elk River Watershed," 1 September 1964; and Robert E. Lowery, Assistant to Director of Tributary Area Development, "Progress of Southern Rural Training Project," 3 September 1964, 39; "220 Elk River, 1963," ECD Papers, TVA Records, NARASE.

Conservation efforts created a new source of income in recreation and a new respect for the environmental richness of the Valley for some southern leaders. TVA encouraged local and state organizations to coordinate efforts and promote cooperation leading to industrialization and economic revitalization. It played a large role in the ongoing defense effort of the Cold War, encouraging munitions plants to locate in the South, even situating atomic energy sites in its watershed. By the 1960s, the Authority's program had helped the South organize its economy to better compete in a national market.

Yet the economic advancement of the mid-twentieth century also had adverse effects on the Valley. Traditional southern ways of life were altered forever by the implementation of TVA's program. Large tracts of the Valley's most fertile farmland lay under the new reservoirs, and new shorelines bisected old property boundaries, contributing to the forced evacuation of thousands of farm families. The Authority drove many into the ranks of industrial labor. Early on, TVA attempted to train residents for skilled labor in government and private business. During the agency's construction phase and World War II, the training programs allowed southerners direct participation in the industrialization of their region. Yet as the Authority focused more fully on industrial growth, concerns for skilled labor gave way to an all-encompassing desire for business, regardless of the consequence. Local and state organizations exhibited a similar disregard for more constructive economic progress. Civic groups and state planning boards wanted to boost the incomes of their citizens. They pushed TVA to act more forcefully to prepare the region for manufacturing, and in return, the agency encouraged industrial recruitment with little direct action to reverse the negative consequences of unrestrained growth. In the 1950s, the Authority began a discussion of the effects of rampant industrialization, including the dislocation that accompanied factory construction and the

challenge of increased pollution in area waterways, but the damage was done. In leaving behind its earlier calls for social transformation, TVA abandoned the hope of a real change in the southern business model.

By the mid-1960s, the Tennessee Valley Authority had solidified the direction of future economic growth in the Tennessee Valley. It became a self-funded agency, able to direct its activities largely as it saw fit. The Tributary Area Development program demonstrated the Authority's continued goal of industrial recruitment, allowing large-scale resource development to play a subsidiary role. TVA was certainly not alone in this decision; the agency found ample support and encouragement among local and state groups, and the movement towards privatization echoed in the actions of other federal government agencies as well. In Huntsville, the defense boom created a major federal presence in the city, an Army facility that would later be joined by a NASA civilian space center. Both the Army and NASA cooperated closely with private industry, even as locals continued to press their leaders to bring jobs and paychecks to the region. More than any other Valley city, Huntsville's remarkable expansion in the 1940s, 1950s, and 1960s illustrated the full extent of federal, state, and local cooperation in the economic development of the Tennessee Valley, as well as the consequences of that partnership.

## CHAPTER 8

### “It Rearranged Everything”: Huntsville and Redstone Arsenal, 1940-1949

I say flatly that the South cannot be prevented from moving swiftly into an area of industrial and social development that will astound the world ... A birdseye view of large-scale Southern industry makes you feel that the South has rubbed Aladdin's lamp.<sup>1</sup>

By 1940, Decatur, Alabama, was reaping the benefits of the work done by the Tennessee Valley Authority. Led by Barrett Shelton, the city embraced industrial development and began the process of attracting businesses to the city. From being “ready to go and no place to go,” with TVA's assistance, the city brought the Ingalls Iron Works, the Nebraska Consolidated Mills, and a number of smaller concerns to the community, and advertised the resources to attract many more. Yet just north of the Tennessee River, the city of Huntsville languished. In one of the first popular accounts of the TVA's work in the region, Willson Whitman noted Huntsville's failure to take advantage of the Authority's bounty. With cheap government power, the city “could have been a sort of capital again,” but instead, leaders watched as the textile mills that underwrote municipal finances faltered in the face of anti-labor sentiment, increasing costs, and decreasing profits.<sup>2</sup>

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<sup>1</sup> Title from Mary Jane Lowe, Interview with George F. Davis, 21 November 1990, 2: “George F. Davis”, Oral History Records, 1965-1993, TVA Records, NARASE. Introductory quote by Donald M. Nelson in “Great Future Predicted for Postwar Dixie,” *Huntsville Times*, 13 April 1944, 1, 3.

<sup>2</sup> Willson Whitman, *God's Valley: People and Power along the Tennessee River* (New York: The Viking Press, 1939), 165-7. Huntsville was the temporary capital of Alabama in 1819.

The change was dramatic. At the turn of the century, Huntsville was the second largest cotton mill city in the South, a processing center for the fields of North Alabama and Central Tennessee. As a 1919 chamber of commerce pamphlet gushed, the city was “in the forefront among Southern commercial centers.” The chamber boasted that if a wall were erected around Huntsville and Madison County, the area would prove completely self-sufficient, thanks largely to the economic strength of the city’s textile mills.<sup>3</sup>

Dallas Mills typified the industrial economy of the city. In 1891, a combination of local businessmen, a group of investors from Nashville, and a large contingent of New York financiers founded the mill. The workers came from the farms of the Valley, leaving tenant agreements and share contracts for an industrial wage. By 1915, Dallas’s mill village boasted 120 houses and 64 tenement buildings, renting rooms for one dollar per month to workers who barely earned enough to feed their families. As historian Wayne Flynt noted, “[Few] were willing to go back to the tenant farms from whence they came [and] even fewer wanted their children to live as they had lived.” When workers attempted to organize, they faced overwhelming opposition from company leadership and the local community.<sup>4</sup> The Depression forced mills across the county to “collapse like a deck of cards.” Dallas lost \$270,039 in 1930 alone, and as a result, closed shop.<sup>5</sup> The failed industries left a number of vacant buildings and thousands of unemployed workers to fend for themselves. By 1940, the decline of the cotton industry in Huntsville left the city in an economic crisis.

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<sup>3</sup> Huntsville and Madison County Chamber of Commerce, *Happy Hustling Huntsville*, 1, 4, Hoole.

<sup>4</sup> See Wayne Flynt, *Poor but Proud: Alabama’s Poor Whites* (Tuscaloosa: The University of Alabama Press, 1989), 93-4, 99, 112.

<sup>5</sup> Rogers et al., *Alabama*, 470.

Like Decatur's leadership, Huntsville's business community saw defense mobilization as a great opportunity. John M. Nelson, the manager of the chamber of commerce, noted as much in a letter to Representative John Sparkman. Citing the industrial "victories" of Alabama cities like Gadsden, Anniston, and Decatur, he argued that "there should certainly be some place in the picture into which Huntsville would fit." Nelson pointed to repaved streets and expanded public services and promised to "step in and make a fight for anything that may be planned." Sparkman warned against the "exaggerated idea" that developments were so widespread as to be easily obtained, but he promised to relay information on the mill properties standing vacant.<sup>6</sup> Nelson and his cohorts attempted to convince Reynolds Aluminum to choose Huntsville, adding their city's name to the growing list of Valley communities interested in the development. Appeals went to Sparkman, Tom Johnson (still with Alabama Power at the time), and Richard Reynolds, advertising Huntsville's viability as a center for defense industry.<sup>7</sup> Reynolds decided to locate at the Sheffield site, but Huntsville's leaders took the loss in stride and immediately asked for federal assistance for other prospects.

After continued appeals to Sparkman, the congressman responded with a list of his attempts on behalf of the city. He had encouraged the community to work to improve its airport, telling the chamber to contact aviation manufacturers personally. He worked to list the city with the Associated Industries of Alabama, advertising the available textile mill properties. Yet he refrained from making promises that would unjustly raise hopes. Asked about Huntsville's possibilities for a government facility, Sparkman told local commissioner J.B. Van Valkenburgh that "Congressmen have absolutely nothing to do with the location of these plants" and noted

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<sup>6</sup> Nelson to Sparkman, 20 May 1940; and Sparkman to Nelson, 22 May 1940, 9: "Madison County: Huntsville Projects, 1939-43," Sparkman House Papers, Hoole.

<sup>7</sup> Nelson to Sparkman, 9 August 1940; and Sparkman to Nelson, 12 August 1940, 22; "House Matters: Reynolds Aluminum," Sparkman House Papers, Hoole.

that industries chose sites based on natural resources and the labor market. He was even more pessimistic in a response to the chamber's secretary, C.H. Pipes: "I am firmly convinced from my knowledge of the plans and studies of the War Department that we cannot hope to get any so-called 'War Baby' in Madison County. We simply are not properly located for it."<sup>8</sup>

By early 1941, as other southern communities witnessed economic revitalization at the hands of government plants and camps, Huntsville fell behind rapidly. Sparkman's doubts echoed the palpable pessimism among the local leadership. An editorial in *The Mercury*, a local newspaper, attempted to spur the populace to action, asking "are we willing to take crumbs that fall from the rich man's table? Or do we want to go after some new blood and money?"<sup>9</sup> Some locals complained that their congressmen had neglected the city in favor of development at Sheffield and Decatur.<sup>10</sup> Sparkman's falling popularity illustrated just how important government connections were to local communities interested in joining the nation's defense boom. In neighboring Decatur, Shelton's connections with TVA helped the city grow, while Nelson and the Huntsville Chamber of Commerce received bleak reports. For Sparkman and his fellow congressmen, the appeals were incessant. As Sparkman counseled caution and realism, Senator Lister Hill gave similar advice to Valley residents. He told Athens resident W.W. Malone that he simply could not get a plant for every interested community.<sup>11</sup> Considering the success of their neighbors, Huntsville's leaders worried that Sparkman and Hill would fail to include their city in the revitalization of the Tennessee Valley economy.

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<sup>8</sup> C.H. Pipes to Sparkman, 16 January 1941; Sparkman to Popes, 17 January 1941; Van Valkenburgh to Sparkman, 8 January 1941; and Sparkman to Van Valkenburgh, 10 January 1941, 9: "Madison County: Huntsville Projects, 1939-43," Sparkman House Papers, Hoole.

<sup>9</sup> Clipping, "An Editorial," *The Mercury* (Huntsville), 17 January 1941, 1, 9: "Madison County: Huntsville Projects, 1939-43," Sparkman House Papers, Hoole.

<sup>10</sup> Circuit Court Clerk H.M. Hughes to Sparkman, 14 March 1941, in *Ibid.*

<sup>11</sup> Hill to Malone, 13 January 1941, 113: 111, Hill Papers, Hoole.

In reality, Sparkman and Hill had actively pursued opportunities for the city since the beginning of the government's defense expansion, but the nature of defense work forced the two to maintain a level of discretion. As early as 1937, the congressmen knew that the Army hoped to build a new chemical warfare arsenal, and in October, two unnamed War Department officials visited the most likely Valley candidate for a new facility, the Muscle Shoals fertilizer plants. In particular, Shoals area leaders hoped to utilize Plant 1, which had remained idle when TVA began nitrate production at Plant 2. In March 1938, Sparkman informed Florence businessman T.M. Rogers that the community should be prepared since "one of the officers who made the inspection tour is a good friend of mine, and I see him every few days." He made similar promises to the Sheffield Board of Commerce, assuring the group that he took every opportunity to ensure that the Valley would be "definitely tied in" with the defense program.<sup>12</sup> The Muscle Shoals facilities did play an important role in the nation's armament. Dedicated to munitions manufacturing in times of war, they changed production from fertilizer to chemical weapons. By the early 1940s, spurred by the pleas of Valley leaders, Sparkman and Hill turned their attention to another community in need of industrial development.

In early June 1941, Huntsville retailer George Mahoney received a telegram from an official with the Nashville, Chattanooga, and St. Louis Railroad, informing him that two men would soon arrive from Baltimore with an interest in land in southwestern Madison County on the Tennessee River. Lieutenant Colonel Charles Ernest Loucks, a War Department Official, and R.F. Graef of the Washington, D.C., engineering firm Whitman, Requardt, and Smith, were greeted at the station by Mahoney and Lawrence Goldsmith, another prominent community leader. As Goldsmith later informed Sparkman, "They were not inclined to talk very much, but

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<sup>12</sup> Sparkman to Rogers, 18 March 1938; and Sparkman to W.T. Archer, 17 January 1939, 36: "TVA: Arsenal, 1938-9," Sparkman House Papers, Hoole.

knew exactly what they wanted, and where they wanted to go.” The officials told their guides that they needed 1500 acres for a building site, surrounded by 30,000 acres as part of the larger project reservation. Sparkman immediately went to work, querying his colleagues in the War Department and conferring with Lister Hill. Loucks and Graef were scouting locations for a proposed chemical warfare arsenal, and Huntsville was one of five sites under consideration. Goldsmith waxed dramatic: “Huntsville is counting on you,” he wrote to Sparkman, “This is our only chance.”<sup>13</sup>

After hearing from Goldsmith, both Sparkman and Hill immediately contacted the War Department’s Chemical Warfare Service. The group had ranked Huntsville second, but after talking with the Alabama congressmen, officials promised to visit the Madison County site personally before coming to a final decision.<sup>14</sup> Huntsville faced stiff competition. The city of Memphis, similarly situated on the Tennessee River, was the clear frontrunner for the chemical plant, and Tennessee Senator Kenneth McKellar used his considerable influence to lobby for the site. However, Sparkman and Hill consistently promoted Huntsville and North Alabama. As Hill wryly noted, “We are in a ‘cat and dog’ fight with [the rival locations] but I think John Sparkman and I can handle the situation.”<sup>15</sup> Hill’s bureaucratic clout and Sparkman’s ties to War Department officials gave the lawmakers enough influence to ensure that Huntsville would receive a fair evaluation, even if the city was not the Army’s first choice. Government ties alone could not bring the development to the Valley, but powerful congressmen provided an important advantage in final considerations, as Sparkman and Hill clearly illustrated.

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<sup>13</sup> Goldsmith to Sparkman, 9 June 1941; Sparkman to Goldsmith, 11 June 1941; and Goldsmith to Sparkman, 12 June 1941, 9: “Madison County: Huntsville Projects, 1939-43,” Sparkman House Papers, Hoole.

<sup>14</sup> Hill to Goldsmith, 14 June 1941, 113: 81, Hill Papers, Hoole; and Sparkman to Amis, 14 June 1941, 34: “Appointments: CWA, Letters Not Filed (2),” Sparkman House Papers, Hoole.

<sup>15</sup> Hill to A. McAllister, 20 June 1941, and 23 June 1941, 113: 81, Hill Papers, Hoole.

Yet without local action, Huntsville would have likely remained a dying mill town. Community leaders, particularly Mayor A. W. McAllister and local businessmen Lawrence Goldsmith and George Mahoney, gladly took the lead role in pressing the city's case to the visiting officials. Huntsvillians remained in constant contact with Sparkman and Hill, as well as the War Department. Goldsmith and Mahoney hosted surveyors and engineers, showing available sites, serving meals, and organizing transportation and accommodation. When Chief of the Chemical Warfare Service William Porter and Army Colonel William English came to Huntsville in June, the city jumped to the top position on the War Department's shortlist, a move partially due to congressional influence, but heavily impacted by their tour of the region. When Porter left Huntsville, he told Goldsmith that Huntsville would receive his vote. Goldsmith noted to Sparkman. "I think George and myself did a good job for two country lads. We entertained them royally." Sparkman replied, "[Porter] reports that you fellows really took care of him and Colonel English and that they were delighted with Huntsville and with the proposed site."<sup>16</sup>

In fact, the gusto of local leaders sometimes led them to reach too far in attempts to bring political pressure to bear on the decision. Mayor McAllister contacted Alabama Governor Bibb Graves, hoping he would "take some hand" in pursuing the proposed arsenal. Graves, enjoying a summer vacation on the Gulf of Mexico, took a break from fishing to make a call to the War Department. McAllister undoubtedly felt that any additional publicity would help Huntsville's case, but Lister Hill, hard at work on officials in Washington, saw Graves's entrance as an unwelcome intrusion "in a thing he was already working on wholeheartedly." Hill called Sparkman and asked "who in the hell got Bibb mixed up in that application for the proposed

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<sup>16</sup> Goldsmith to Sparkman, 16 June 1941, and Sparkman to Goldsmith, 19 June 1941, 34: "Appointments: Chemical Warfare Arsenal, Letters Not Filed (2)," Sparkman House Papers, Hoole.

plant.” In Hill’s view, the inclusion of Governor Graves in the campaign for development insinuated local dissatisfaction and a lack of confidence in Hill’s federal influence, despite the fact that the two politicians were longtime friends and allies.<sup>17</sup> The situation was particularly irksome considering Hill’s personal relationship with General Porter and other Chemical Warfare officials. Graves’s calls were unnecessary and the unwanted interference threatened the promised development.<sup>18</sup>

McAllister’s appeal to the governor, while annoying, did nothing to derail Huntsville’s campaign. Instead, his enthusiasm was part of the city’s zeal for new development. Business leaders, concerned that the failing mills would bring the community down with them, jumped at the opportunity to locate a defense plant in the county. New jobs would blunt the impact of mill unemployment, and an additional payroll would boost retail sales, housing construction, and tax revenue. Goldsmith, Mahoney, and McAllister, along with the rest of Huntsville’s business leadership, provided a solid local front for Sparkman and Hill’s legislative wrangling. Their combined efforts repaired the city’s (and the region’s) economic fortunes.

The location of a chemical warfare arsenal in Huntsville signaled the beginning of a great transformation in the city. The plant came at the forefront of the defense boom that began during World War II and lasted through the Cold War. Huntsville benefited from a number of distinct advantages. Thanks to TVA, the region enjoyed cheap power, plentiful water, and improved transportation networks, and the ongoing cooperation between Valley leaders and Authority officials provided a wealth of experience in local, state, and federal cooperation. The Valley’s

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<sup>17</sup> Virginia Van der Veer Hamilton notes that Graves’s political success had provided an example for a young Hill, who gained the support of Graves’s statewide machine. In 1937, Graves appointed Hill to the unfinished Senate term of Hugo Black. Hamilton also writes that Graves was one of only two men to ever poke fun of Lister’s name, referring to him as “Lister the Blister.” See Hamilton, *Lister Hill: Statesman of the South* (Chapel Hill: University of North Carolina Press, 1987), 3, 83-85.

<sup>18</sup> Louie Collier to Sparkman, 30 June 1941, and Sparkman to Collier, 1 July 1941, 9: “Huntsville Projects,” Sparkman House Papers, Hoole.

congressional leadership worked diligently for local development. Their campaign was encouraged and assisted by community businessmen who saw government investment as the first step in the economic revitalization of their city. As in Florence and Decatur, Huntsville's leaders believed government investment to be the key to prosperity, and as the money poured into the city, the business community frantically worked to accommodate government projects and add to the city's financial base. The interaction between local and federal developers, more than any other aspect of the economic boom, characterized the city's new Sunbelt economy, and the story of Huntsville's growth illustrated the continuing importance of federal investment in the development of the Tennessee Valley, as well as the way that local communities worked to encourage economic progress.

On July 2, 1941, John Sparkman sent a confidential note to Barrett Shelton, informing the *Decatur Daily* editor that the Army had chosen Huntsville for its chemical warfare arsenal, awaiting only President Roosevelt's signature before the decision could be made public. The next day, Sparkman's office issued telegrams and a press release, formally announcing the \$41.3 million project, with a \$6 million adjoining ordnance plant. The arsenal would manufacture "smoke materials and other chemical warfare agents" on a 30,000 acre tract of land alongside two railroad lines and the Tennessee River. The ordnance plant would store and prepare shell casings to hold the chemicals created at the arsenal. More importantly for Huntsville's struggling economy, the project would employ thousands of workers for construction and operation with "a high percentage of the operating labor ... drawn from the community within a radius of 25 to 30 miles of the Arsenal site."<sup>19</sup>

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<sup>19</sup> Press Release, "New Chemical Warfare Arsenal," [undated]; and Sparkman to Goldsmith, 3 July 1941, 34: "Appointments: Chemical Warfare Arsenal, Letters Not Filed (2)," Sparkman House Papers, Hoole. See also

Sparkman's release stuck to the official details of the project, but local leaders expounded on the decision. The *Huntsville Times* praised Sparkman and Hill for carrying the needs of the Tennessee Valley to Washington and promoting the region's beneficial location and resources to those making the important decision. The paper also recognized the community leaders who hosted the visiting engineers and army officers on inspections of the area. Mahoney and Goldsmith "contributed a great deal in making their stay pleasant and presenting the social, manufacturing and other manifold advantages of the city and county." The plant was not a "war baby," the paper promised, but a permanent part of the regional economy, housing a staff of officers, enlisted personnel, and civilian workers that called Huntsville home and whose "salaries and wages will flow into the channels of trade of this city and this section."<sup>20</sup> The facilities provided thousands of jobs for Huntsvillians and, as many hoped, a secure future for the Valley.

Most residents were as ecstatic as the *Times*. News of the decision leaked the night before, thanks in part to off-the-cuff comments by Alabama congressman Frank Boykin and subsequent radio broadcasts – as one leader noted, "even all the cooks and the houseboys have heard about the proposed plant." The *Birmingham Post* contacted *Huntsville Times* editor Reese Amis, asking permission to announce the plant a day early. On July 3, when the news officially broke, the public erupted in celebration. Rents rose rapidly, owners called in leases, and the city witnessed a boom that recalled the days of Henry Ford's offer for Muscle Shoals. Amis wisely predicted, "It's going to be hard to get people to keep their heads."<sup>21</sup> Sparkman became a local hero, solidifying his reputation and ensuring his eventual promotion to the Senate. As Amis

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"Huntsville Given \$41,293,000 Chemical War Service Plant," *Huntsville Times*, 3 July 1941, 1; and "Redstone Ordnance Plant to Open Operations Soon," *Huntsville Times*, 1 February 1942, 2.

<sup>20</sup> "Huntsville Given \$41,293,000 Chemical War Service Plant," *Huntsville Times*, 3 July 1941, 1; and "It's a Great Day," *Huntsville Times*, 3 July 1941, 4.

<sup>21</sup> Reese Amis to Sparkman, [2 July 1941] and [3 July 1941], 34: "Appointments: Chemical Warfare Arsenal, Letters Not Filed (2)," Sparkman House Papers, Hoole.

noted to the congressman, “It will do you a world of good and stop some croakers who have been saying that you have been trying to turn everything to the Tri-Cities.” Sparkman tried to share the praise with Hill, but he continued to receive most of the credit. In a 1990 interview, George F. Davis attested to the Alabamian’s legacy: “[Sparkman] was the one that got all the arsenal coming to Huntsville.”<sup>22</sup> The political capital Sparkman gained with the arsenal served him well in the coming years.

As with TVA’s reservoir construction program, the first consideration in the actual location of Huntsville Arsenal was the acquisition of land. Again, tenant farmers were adversely affected by the location of the government facilities. Nearly 550 families lived on the planned reservation, 70% of whom were African American tenant farmers. The arsenal also displaced 31 known cemeteries (white and black), three black schools, eleven black churches and one white church.<sup>23</sup> In fact, the 30,000 acres set aside for the arsenal proved a study in contrasts. The site boasted one of Madison County’s oldest homes, the Lanier place, and Cedar Grove Methodist Church, one of the region’s oldest churches.<sup>24</sup> The surrounding fields were worked by black farm laborers, a situation that recalled the Antebellum South as much as the twentieth-century agricultural economy. In a matter of months, the Old South gave way to a New South defense industry, manufacturing shells for the American war effort.

Relocation began immediately. In late July, three black families vacated a 160-acre plot needed as a headquarters for the construction operation. The Army paid the farmers for their crops, but unable to find new farms in time, officials moved the families to temporary housing

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<sup>22</sup> *Ibid.*, and Mary Jane Lowe interview with George F. Davis, 21 November 1990, 2: “George F. Davis,” Oral History Records, 1965-1993, TVA Records, NARASE.

<sup>23</sup> “Progress Seen Upon Barracks in Plant Area,” *Huntsville Times*, 21 August 1941, 1.

<sup>24</sup> “Views of Chemical Arsenal Site,” *Huntsville Times*, 22 July 1941, 3.

near Alabama Agricultural and Mechanical University on the opposite side of the city.<sup>25</sup> Removals soon began apace. In mid-October, War Department officials announced a November 30 deadline for people on the reservation to vacate their houses and property. Theoretically, the intervening month gave farmers time to harvest their crops, valued in 1941 at nearly \$1 million. Yet by the November deadline, only 200 families on the property had moved, and the government had not come to a decision on the 2,500 graves that needed to be reinterred elsewhere.<sup>26</sup> By mid-January, almost two months after the deadline, only four families remained on the land. The government paid \$600,000 for 81 tracts of land, and 112 families required a total of \$2,000 in additional moving expenses. Nearly half of the families relocated to farms in Madison County, and 180 families moved into town and sought employment at the arsenal.<sup>27</sup> Though dwarfed by TVA's massive relocation efforts, the War Department faced many of the same challenges in moving the 550 families on the arsenal reservation, and once again, government officials struggled to meet the needs of the displaced.

In late July, the Farm Security Administration set up a relocation office to act as a "clearing house," listing land for sale or rent in the Valley. As one official noted, "Our intention is to get new homes for these people as near their old communities as we can."<sup>28</sup> This was overly optimistic. Thanks to TVA, much of the Valley's best farmland lay under acres of water, and removal policies made scarce farmland that much rarer. The lack of land combined with the ever increasing demand to drive up prices on remaining fields. The government needed a

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<sup>25</sup> "Initial Tract of Land Taken for War Plant," *Huntsville Times*, 27 July 1941, 1; and "3 Farms Vacated on Arsenal Site," *Huntsville Times*, 4 August 1941, 2.

<sup>26</sup> "Arsenal Residents Given Until Nov. 30<sup>th</sup> to Move," *Huntsville Times*, 15 October 1941, 1.

<sup>27</sup> "Relocation Office Continues Moving," *Huntsville Times*, 21 December 1941, 10; and "Arsenal Families Moved from Area," *Huntsville Times*, 25 January 1942, 3.

<sup>28</sup> "FSA to Relocate Farm Families," *Huntsville Times*, 23 July 1941, 1; and "Appraisers Seek Good Farm Land," *Huntsville Times*, 28 October 1941, 2.

temporary expedient to let land values calm before permanently settling families. The FSA began building prefabricated homes, providing temporary residence for the thousands of farmers across the Southeast who lost their homesteads in the name of national defense. The units consisted of a house, barn, smokehouse, chicken house, outhouse, well, and a fenced personal garden.<sup>29</sup> Given the circumstances of removal, the FSA provided a chance for removed families to continue their accustomed way of life. Yet the trappings of the prefabricated homes could not replace an attachment to the land developed over decades of family farming. The FSA provided some additional assistance, including grants for moving expenses, rehabilitation loans, and lists of available homes and farms.<sup>30</sup> For many, however, the help was not enough to keep them on the farm. The move provided encouragement to seek a living outside the agricultural economy.

Physical displacement was only one aspect of the larger transition facing agricultural interests in the arsenal area. The new plant made manufacturing a viable employment option for many forced off of their farms. The “attractive jobs” at the arsenal paid much more than farm labor, and offered benefits and job security lacking in the agricultural sector. Jobs on the arsenal, whether in construction or manufacturing, paid up to five times the average daily wage of farm laborers in Madison County.<sup>31</sup> Within days of the announcement, John H. Wall wrote Sparkman for work, fearing the arsenal would “terminate my farming activity.” Kathleen Jones came to a similar conclusion, noting that the plant would disrupt local farm labor.<sup>32</sup> For those Valley residents that relied on cheap, available labor, the arsenal provided a direct challenge. J. Walter

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<sup>29</sup> “Ousted Farmers Being Relocated,” *Huntsville Times*, 29 September 1941, 2.

<sup>30</sup> “FSA Explains How Help Can Be Given Families,” *Huntsville Times*, 3 November 1941, 2.

<sup>31</sup> “Labor Shortage Sure to Exist,” *Huntsville Times*, 9 March 1942, Farm and Home Section, 1, 3; and “Labor on Farms Said Improved,” *Huntsville Times*, 3 May 1943, 1.

<sup>32</sup> Wall to Sparkman, 7 July 1941, 34: “Appointments: Chemical Warfare Arsenal, Letters Not Filed (2)”; and Jones to Sparkman, 25 July 1941, 9: “Madison County: J, 1937-41,” Sparkman House Papers, Hoole.

Clopton of the Decatur Ice Cream and Creamery Company pleaded with Sparkman to keep similar “war babies” out of Decatur and Sheffield. He feared that a new facility might severely limit the supply of milk available for dairy products by relocating a number of farms along “Dairy Road,” a stretch of dairy land west of Decatur, and prevent him and other business owners from finding cheap workers. With higher pay and better benefits, Huntsville Arsenal and other defense plants were “proving a headache for legitimate business and farm labor.”<sup>33</sup> By March 1942, farm owners were reporting labor shortages, leaving fields uncultivated and crops unharvested. The war exacerbated the situation, causing an increased demand for farm products and threatening to draw even more men out of the labor market via the draft.<sup>34</sup>

The problem extended to domestic labor as well. As George F. Davis remembered, the arsenal upset the “old settlers”: “All their hired help left, and they couldn’t hire anyone. They had people who did all their chores for them. So they all left, because they got good jobs.” One friend of Davis’s went to the “little settlement” where “the poor people lived” to recruit someone to do her laundry. The “poor people,” however, were no longer looking for work. One told Davis’s friend that, with jobs at the arsenal, “[we’re] trying to hire somebody to work for us.”<sup>35</sup> Similar scenes played out across the Southeast. Government defense projects provided a quick, direct injection of jobs and payrolls into a region beginning to move from the field to factory. For many farm and mill owners, the new jobs at the arsenal were a direct threat to their way of life. Without access to the cheap labor that proved the foundation of their extractive industries and monoculture, the old southern elite faced a difficult transition.

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<sup>33</sup> Clopton to Sparkman, 18 August 1941, 11: “Morgan County: Decatur Projects, 1940-1,” Sparkman House Papers, Hoole.

<sup>34</sup> “Labor Shortage Sure to Exist,” *Huntsville Times*, 9 March 1942, Farm and Home Section, 1, 3.

<sup>35</sup> Mary Jane Lowe, Interview with George F. Davis, 21 November 1990, 2: “George F. Davis”, Oral History Records, TVA Records, NARASE.

For many more Huntsvillians, jobs on the government reservation meant a welcome economic boost at the end of a long depression. News of the defense project brought a flood of requests to Sparkman for employment. Claude Hudson of Elkmont, a rural town in northern Limestone County, asked the congressman for employment information less than a week after the plant became public knowledge. With Sparkman's assistance, Hudson applied for a guard position and was hired in early November.<sup>36</sup> Sparkman also recommended Marland M. Fowler, a "poor man with a wife and three children" for a position at the arsenal.<sup>37</sup> By late August, construction crews and initial employment at the plant reached 1,300; in early November, numbers surpassed 5,000 and payrolls topped \$175,000.<sup>38</sup> Pearl Harbor added to the boom conditions. The arsenal began 24-hour operations and contractors sped construction at the still-unfinished Redstone Ordnance Plant, bringing total employment to over 10,000 men. The arsenal's personnel office stayed open for 16-hour days, sometimes processing as many as 70 job applicants per hour.<sup>39</sup>

With the demands of war boosting ordnance production, nearly every applicant expected to receive a job. Cecil Brooks of Trinity complained to Sparkman that "several" area men were "not being fairly dealt with" by arsenal personnel, who refused to offer them jobs. Brooks resigned his position as a teacher to obtain defense work, and his failure to find a job left him idle. He also heard that many of the upper level management were from out of state. Upon

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<sup>36</sup> Hudson to Sparkman, 7 July 1941; Hudson to Sparkman, 16 August 1941; and Hudson to Sparkman, 7 November 1941, 33: "Appointments: Chemical Warfare Arsenal, H's," Sparkman House Papers, Hoole.

<sup>37</sup> Fowler's actual fate is unrecorded. Fowler to Sparkman, 26 August 1941, 33: "Appointments: Chemical Warfare Arsenal, F's," Sparkman House Papers, Hoole.

<sup>38</sup> "1,029 Persons Now Working on Big Plant," *Huntsville Times*, 25 August 1941, 1; and "Payrolls Rise as More Speed Seen on Plant," *Huntsville Times*, 8 November 1941, 1.

<sup>39</sup> "Chemical Plant Jobs Announced," *Huntsville Times*, 30 November 1941, 3; "6,500 Will Be Added on Arsenal," *Huntsville Times*, 14 December 1941, 1, 13; and "10,000 Persons Now at Work on War Plant," *Huntsville Times*, 17 December 1941, 1.

investigation, Sparkman learned that Huntsville Arsenal was “98% staffed” by mid-December and that some of the hires had come from outside the Valley, despite promises by officials that the arsenal would observe local preference employment. As one engineering firm official told the congressman, “We can assure you that there has never been any idea of calling men from distant points if we can find the qualified men here who have the experience and knowledge necessary to do the work called for.” However, when trained men could not be drawn from Huntsville and Madison County, “it has become quite necessary that we do get the men with the required experience.”<sup>40</sup> Brooks voiced concerns already shared by many in Huntsville and in Washington. As the arsenal’s production capabilities became more complicated, local labor found itself less prepared to meet the plant’s employment needs. In order to maintain the benefits of the facility’s payroll, Huntsville’s community leaders needed to find ways to train local workers more thoroughly and more efficiently.

In September, 300 men and women attended opening registration of training classes at an extension center of the University of Alabama, temporarily housed at Huntsville High School. According to Supervisor Warren C. Moore, the free courses were designed “to fill definite needs in the national defense program.” Six hours each week, students learned basic accounting, structural design, mechanical and electrical maintenance, supervision, industrial engineering, chemistry, and other technical skills useful on production lines at the arsenal and other defense facilities.<sup>41</sup> George Davis enrolled in a “refresher course” simply by expressing interest in the class. He received books from the university, and his instructor came from the Edgewood

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<sup>40</sup> Brooks to Sparkman, 20 December 1941, 20 December 1941; and W.C. Brown, Kershaw, Butler Engineers, Ltd., 26 December 1941, 33: “Appointments: Chemical Warfare Arsenal, B’s,” Sparkman House Papers, Hoole.

<sup>41</sup> “Defense Training Classes Opened,” *Huntsville Times*, 9 September 1941, 1; “Defense Classes Now Registering,” *Huntsville Times*, 11 December 1941, 18; and “Training Urged for Arsenal Jobs,” *Huntsville Times*, 16 January 1942, 2.

(Massachusetts) Chemical Warfare Arsenal.<sup>42</sup> The government-sponsored coursework was crucial to staffing at the arsenal, and the farmers who participated undoubtedly found the transition from the farm to the production line much easier than those without basic training in manufacturing. Yet the extension center did little to prepare the community for the new economy. The trainees became line workers and foremen, prepared with the skills needed for their specific jobs. They did not become engineers, chemists, or technicians, whose skills easily translated into higher paying jobs in the public and private sector. The classes were a halfway measure. Without a more highly skilled workforce, Huntsville struggled to staff postwar defense industries and maintain its economic advantages.

Government employment meant better paychecks and rudimentary on-the-job training for workers leaving the land or the mill village. Yet perhaps the greatest change in the lives of working Alabamians came with the government's encouragement of union labor. At Huntsville Arsenal, the actions of labor organizations proves the biggest challenge for community leaders used to the non-union climate of the southern labor force. Huntsvillians were no stranger to unions; labor activity at the town's cotton mills was a common occurrence in the Depression years when falling wages and New Deal legislation encouraged workers to create a common front. In fact, in July 1934, the United Textile Workers began the Great Strike Wave in the city, as 5,000 millhands walked off their jobs and "flying squads" of organizers threatened anyone trying to return to work. While southern and central Alabama mills continued running, between 16,000 and 23,000 of the state's entire textile workforce of 40,000 participated. The UTW won

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<sup>42</sup> Lowe, Interview with Davis, 21 November 1990, 2: "George F. Davis," Oral History Records, TVA Records, NARASE.

higher wages and went back to work, but the strike soured the city's business leadership on the unionization of local workers.<sup>43</sup>

Mill owners constantly battled their organized workforce, but Huntsville Arsenal provided a completely different environment. In September, E.S. Coffey, personnel director for the construction company working on the arsenal, announced that only union labor would be employed at the Huntsville site, creating a closed shop for the International Hod Carriers. The statement brought immediate criticism. City Commission Chairman Joe Van Valkenburgh received complaints that the company forced applicants to “pay tribute” to get jobs, referring to the initiation fee and weekly dues required of union members. The *Huntsville Times* immediately demanded a congressional investigation into the “labor racket” in which the “forgotten man” was forced to pay to work for “his own government.”<sup>44</sup> Editorials connected union officials with out-of-town agents, seeking to introduce “alien” practices in the Tennessee Valley. As craftsmen came into Huntsville, one reporter noted, they “seem to know exactly who to see, and what to do to obtain prompt employment,” while local unskilled laborers paid their dues and waited in the Hod Carriers’ headquarters waiting to be called to work.<sup>45</sup> The *Times* charged that officials at the arsenal, the construction contractors, and the state’s congressmen “all lend themselves to the perpetrators of this fraud.” The attention brought results. The construction quartermaster, Major Neil McKay, was transferred to Arkansas and Coffey resigned. Worker selection became the responsibility of the Alabama State Employment

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<sup>43</sup> Wayne Flynt, *Alabama in the Twentieth Century* (Tuscaloosa: The University of Alabama Press, 2004), 140-1.

<sup>44</sup> “Men Required to Join Union to Land Jobs,” *Huntsville Times*, 3 September 1941, 1; and “Demand Congressional Investigation,” *Huntsville Times*, 7 September 1941, 4.

<sup>45</sup> “Crowd around Labor Union’s Offices Drops,” *Huntsville Times*, 10 September 1941, 1.

Service.<sup>46</sup> The incident further soured the environment for organized labor in the city. When workers acted to address grievances, the business community grew even angrier.

The newly appointed construction quartermaster, Carl Breitweiser, immediately stirred discontent. In an attempt to cut costs and increase efficiency, he began using semi-skilled and unskilled laborers to lay pipes, replacing unionized plumbers. In response to the jurisdictional challenge, the plumbers walked off the job to “attend a funeral.” The *Huntsville Times* backed Breitwieser who was “making an honest, vigorous effort to build the arsenal as cheaply as possible ... and as rapidly as possible.” The striking workers were “trying to throw monkey wrenches” into the project, and the paper called for law enforcement to investigate union activity.<sup>47</sup>

The Japanese attack on Pearl Harbor and the U.S. entrance into World War II worsened public perception of unionization at the arsenal. The Hod Carriers lost all responsibility for employment; laborers were not required to join a union, and all hiring was taken over by the newly staffed construction personnel office. The plumbers immediately returned to work, offering to work one day each week without pay (the government declined the offer). The war brought a new immediacy to the project, and the construction and operational crews were placed on two ten-hour shifts with an intervening four-hour maintenance shift, seven days per week.<sup>48</sup> The Chemical Warfare Service posted bulletins around the facility, noting that production at Huntsville Arsenal would “play an important part in the nation’s war effort.” The unwritten implication for any labor activity that hampered shell manufacturing was evident.

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<sup>46</sup> “Some Figures,” *Huntsville Times*, 14 September 1941, 4; and “Big Shakeups in High Jobs at War Plant,” *Huntsville Times*, 5 October 1941, 1.

<sup>47</sup> “Plumbers Leave Job on Arsenal, Other Labor Trouble Disclosed,” and “Stop This Foolishness,” *Huntsville Times*, 5 December 1941, 1, 4.

<sup>48</sup> “Jap Ships Flee U.S. Fleet; \$4,000,000 More for Arsenal,” *Huntsville Times*, 12 December 1941, 1; and “Change Slated to Ban Racket in Jobs Here,” *Huntsville Times*, 28 December 1941, 1, 6.

When electricians struck in early January, asking for a wage increase, the public response was hostile. Breitwieser immediately held a conference with union leaders and assured them that pay would rise – the electricians were back at work by the beginning of the night shift. Yet the ten-hour strike had greater reverberations. The *Huntsville Times* called the strike “tom foolishness,” and asked, “Is there no PATRIOTISM, no LOYALTY from these people who are among the highest paid labor men in the country?” The workers struck despite pleas by arsenal officials and “the known fact that American soldiers and civilians are being killed by the Japs.” Days later, the paper remained incensed, calling for workers to stay on the job and not “trifle” with “union rights or privileges.” Phil Peeler, manager of Lincoln Mills, one of the few remaining active cotton mills in the city, praised his workers for staying on the job and warned, “Under Hitler, there can be no free labor unions, because free labor unions are symbolic of a free people.” Worker organization was a privilege to be enjoyed only after wartime production met the country’s needs.<sup>49</sup> When electricians struck at Tennessee Coal and Iron in Birmingham, the *Huntsville Times* again blasted the action, calling for authorities to “knock some sense into the heads of the leaders, as well as the rank and file of labor.”<sup>50</sup>

Labor received the message. Activity sharply dropped at the arsenal as the war continued, and the short electricians strike in January 1942 was the last major wartime work disturbance at the plant. In July 1943, Sparkman praised workers at the facility: “We not only have labor that wants to work and avoid trouble, but is the finest in the United States.”<sup>51</sup> The war buttressed anti-labor sentiment in the city, discouraging union activity as traitorous when

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<sup>49</sup> “Electricians Quit One Day at War Plant,” *Huntsville Times*, 2 January 1942, 1, 2; “The Electricians,” *Huntsville Times*, 2 January 1942, 4; “Work, not Squabble,” *Huntsville Times*, 8 January 1942, 4; and “Lincoln Pledges All-Out War Production Efforts,” *Huntsville Times*, 13 January 1942, 1, 3.

<sup>50</sup> “Strike, Strike, Strike,” *Huntsville Times*, 28 July 1942, 4.

<sup>51</sup> “Sparkman Lauds Southern Labor,” *Huntsville Times*, 25 July 1943, 1, 3.

increased production could help end the war in Europe, Africa, and the Pacific. Even as TVA boasted a “progressive” labor policy, Huntsvillians continued to view organization and activity at their government facility with suspicion, and workers quickly learned that organization remained extremely difficult in the modernizing South.

The transition from field to factory at the arsenal facility brought another challenge for many new employees: interaction with African American and women workers taking advantage of the influx of jobs. Of course, southern women were not strangers to industrial labor. As Jacquelyn Dowd Hall and others have noted, white women were “welcomed with open arms” into cotton mills, providing cheap, unskilled labor (and sometimes, an assurance of their children’s even cheaper labor).<sup>52</sup> Huntsville, dotted with cotton mills, boasted a workforce which included many white women. The depression made women’s labor a necessity for many families. While some industries preferred to hire only male breadwinners, the dire economic straits meant that every family member able to earn a wage needed to look for work.

With thousands of farm families heading for the city, and with the increase in job opportunities at the arsenal facility, women joined men in asking for employment. Mrs. Robert E. Hatchett (she never gave her own name) contacted Sparkman looking for jobs for herself and her husband: “We both are ready to help at this crucial moment.” Mrs. Hatchett had two years of college study in Home Economics and professed an interest in “dietetics, clerical, and hostess work.” Sparkman recommended Mrs. Hatchett for clerical positions and got her husband a job as a guard.<sup>53</sup> After being laid off from her job at a local mill, Christabel Burleson of Hartselle asked Sparkman for help in transferring from “an industry which has little or no future at the

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<sup>52</sup> Hall et al., *Like a Family: The Making of a Southern Cotton Mill World* (New York: W.W. Norton, 1987), 67.

<sup>53</sup> Hatchett to Sparkman, 2 October 1941; Sparkman to Underwood, 28 November 1941; and R.F. Murphy, 1<sup>st</sup> Lt. C.E., to Sparkman, 19 December 1941, 33: “Appointments: Chemical Warfare Arsenal, H’s,” Sparkman House Papers, Hoole.

present” to Huntsville, and the congressman encouraged her to apply through the Civil Service for a position.<sup>54</sup> Gladys McCurry, Sparkman’s sister, initially wrote her brother attempting to get his nephew, “Bart,” a job, mentioning casually that “I wish I could get on at the plant too. Seems there would be something, filing papers, [answering] telephones and such that I could do.” As the congressman later noted, McCurry’s husband had died, leaving an insurance policy that provided only \$40.00 per month to feed, clothe, and house McCurry, her son, and a young daughter. By renting rooms, McCurry eked out a living, but “[times] are getting more difficult for her to do this.” The extra income from work at the arsenal would be a welcome addition.<sup>55</sup>

Sparkman contacted arsenal head R.C. Ditto on McCurry’s behalf; Ditto sent her an application promising “first consideration” for any available job, and Sparkman promised to go with her to the interview. In April 1942, McCurry interviewed with a “mighty nice lady” for a position paying \$105.00 per month. Sparkman promised Ditto would “take care” of her.<sup>56</sup> Granted, Sparkman put forward extra effort to secure McCurry a position, but his sister’s request and economic condition were typical of many women that sought work at Huntsville Arsenal. As Nancy Dickson, a civil service stenographer who moved to the facility with her husband, recalled, ““When I learned the amount of salary earned by a temporary Civil Service clerk-stenographer - \$135 per month, sixty-five percent more than the salary I had earned in Memphis,

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<sup>54</sup> Burleson to Sparkman, 23 February 1942; and Pounders to Burleson, 27 February 1942, 33: “Appointments: Chemical Warfare Arsenal, B’s,” Sparkman House Papers, Hoole.

<sup>55</sup> McCurry to Sparkman, [mid-March 1942], 33: “Appointments: Chemical Warfare Arsenal, B’s,” Sparkman House Papers, Hoole.

<sup>56</sup> Sparkman to Ditto, 27 March 1942; Ditto to McCurry, 28 March 1942; McCurry to Sparkman, [mid-April 1942]; and Sparkman to McCurry, 16 April 1942, 33: “Appointments: Chemical Warfare Arsenal, B’s,” Sparkman House Papers, Hoole.

the mud and the rain and our dreadful room seemed more bearable.”<sup>57</sup> With hundreds of clerical, housekeeping, and service positions available, the government plant offered women an admittedly gender-specific economic alternative.

At first, Huntsville Arsenal’s female employees were relegated to clerical positions and lighter production line work, leaving the “heavy labor” for men. Yet as the draft called the city’s male labor force to war, the arsenal began a more expansive hiring of female workers. In January 1942, officials announced an increase in the age limits for employment for women from 18-25 to 18-30 and a raise in pay to \$5.00 per day. Female employees inspected, tested, and handled metallic materials and mechanical parts, jobs normally given to the arsenal’s male workforce.<sup>58</sup> The *Huntsville Times* praised the “she-women” that were “rapidly moving into the he-men jobs.” These “industrial amazons” trained to take on “difficult man-sized jobs” as their husbands, fiancés, sons, fathers, and brothers fought overseas. The *Times* assured readers that “[most] of the women do their own housework before or after their shifts” but traditional gender roles were definitely strained by wartime circumstances.<sup>59</sup> As women took over male roles in the plants, they benefited from the same specialized training that had been offered to male workers. The University of Alabama extension center offered classes for female defense workers, and by December 1942, nearly 40% of production workers at the plant were women.<sup>60</sup>

Some women were able to find positions among the skilled technicians, though such occurrences were rare enough to merit special attention. Olivia White began working as a

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<sup>57</sup> Elise Hopkins Stephens, *Historic Huntsville: A City of New Beginnings* (Woodland Hills, CA: Windsor Publications, 1984), 107.

<sup>58</sup> “Ordnance Plant to Hire Women,” *Huntsville Times*, 22 January 1942, 2.

<sup>59</sup> “Industrial Amazons,” *Huntsville Times*, 30 August 1942, 4.

<sup>60</sup> Kaylene Hughes, *Women at War: Redstone’s WWII Female “Production Soldiers”* (Redstone Arsenal Historical Office, [c. 1991]), 7-8, in Heritage Room, Huntsville Public Library (HPL).

chemist at the arsenal in late 1942. A graduate of Agnes Scott College, White analyzed the chemical makeup of munitions, preventing “duds” from being shipped with live rounds.<sup>61</sup> Even as women like White pushed the boundaries, female workers maintained a distinct femininity. They bought their own outfits and wore mandatory caps as fashionably as possible. Sing-alongs buttressed morale, and women workers enjoyed special meals. Female workers felt the obligations of home life in much stronger ways than their remaining male counterparts. Women exhibited higher levels of absenteeism than men, despite army-provided counseling, housing, day care, and after-school activities.<sup>62</sup> Expected to care for the house as well as earn an extra paycheck, women had to balance their work and home lives.

As women began to take prominent roles in production at plants across the Valley, they shared in dangers that accompanied chemical weapons manufacturing. Accounts from the region’s other major chemical facility, the Muscle Shoals plant, illustrate the changing nature of female employment. In 1943, Geraldine Byrd learned that TVA planned to hire women. She took an entrance exam and began as a cooler operator, making sure that water flowed into chambers that cooled nitric acid. As Byrd recalled, conditions were “terrible” – buildings opened to the elements, exposing the workers to unpredictable Alabama weather. She recalled, “When the sun in the afternoon hit those towers and those nitric acid fumes come off, it would just take every bit of the skin off of you. We went to New Orleans one time and we told everybody we had been sunbathing. The skin on our faces was peeling off so badly.”<sup>63</sup> Byrd remembered the dedication of her fellow female workers. Once, when a “big storm” hit the

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<sup>61</sup> “Huntsville Girl Arsenal Chemist,” *Huntsville Times*, 24 December 1943, 14.

<sup>62</sup> Hughes, *Women at War*, 8, 19-20.

<sup>63</sup> Geraldine R. Byrd, Interviewed by Mary Jane Lowe, 16 September 1992, 4, 6, 2: “Byrd Geraldine,” Oral History Records, TVA Records, NARASE.

reservation, the male workers ran for shelter while Byrd stayed behind, turning off the high pressure steam in her cooling system. Byrd remained at Muscle Shoals until 1954, though she expected to be terminated at the end of the war effort. She told her interviewer that she had been told that “we were just really hired [for] the war years.”<sup>64</sup> Pearline Smith, a custodial worker, came to a similar conclusion: “They just had us to replace those men. After the war they started coming back, and TVA hired the men because you know men had the most responsibilities. They’d work a man before they would a woman.”<sup>65</sup> Women workers may have occupied the jobs temporarily, but while manning the production lines, they shared the labor and danger of their male counterparts.

Women were not the only beneficiaries of the expanded economic opportunities. Shelby Johnson wrote to Sparkman in late November 1941 asking about opportunities for black men at the arsenal. When Johnson contacted the Huntsville Chamber of Commerce about training opportunities for the black community, he was shunted aside. He looked to his congressman for assistance: “[All] these years in my loyalty to Huntsville and America and my struggling to send two children to college to prepare them so that they can sustain themselves [and] the best that they can offer them at the arsenal is a job making beds in the bunk houses at twelve dollars per week. It makes me feel that all of my efforts have gone for naught!” Johnson’s daughter, a social worker trained at Howard University, applied for work in the rapidly expanding city, but was told that “there were not enough Negroes in one locality and that a white person would fill the job better.” Black farmers forced off of their land in order to make room for the arsenal were denied access the benefits that came from the government investment. Johnson enunciated

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<sup>64</sup> *Ibid.*, 7, 15.

<sup>65</sup> Pearline Smith, Interviewed by Mary Jane Lowe, 16 September 1992, 10, 8: “Smith, Pearline,” Oral History Records, TVA Records, NARASE.

feelings that had begun to spread throughout the black community: “We know that there is some distinction between the races but for the jobs that Negroes are qualified to do and never appointed makes us wonder.” Sparkman professed sympathy, but told Johnson that racial restriction in the labor unions and a lack of black men looking for training limited opportunities at the facility. He complemented Johnson’s “fine outlook and civic mindedness,” but cautioned him that “progress comes slowly.”<sup>66</sup>

The war sped that “progress,” though black workers never enjoyed the same opportunities as their white counterparts. By early 1943, enough black workers found jobs at the arsenal that the city council worked to develop a new segregated housing unit at the “circus grounds” east of the city.<sup>67</sup> Upon returning to Huntsville for a 36-day leave in 1945, Private First Class Freddie L. Rice noted the small changes overcoming the southern town. Places that had once refused to hire blacks now integrated their staffs. Rice was pleasantly surprised to find that African Americans were “being upgraded and integrated in war industries” in Huntsville.<sup>68</sup> Black workers never enjoyed the same opportunities as their white counterparts, but they did make real gains during the defense emergency that would create a more solid economic foundation for the social and political advances of the coming decades.

African American women found work at the arsenal harder to obtain. While some black men worked on the production line alongside their white neighbors, the lack of adequate segregated facilities kept the demand for black women low. As base historian Kaylene Hughes noted, black women also suffered from fears by the officials at the arsenal that the performance

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<sup>66</sup> Johnson to Sparkman, 30 November 1941; and Sparkman to Johnson, 9 December 1941, 34: “Appointments: Chemical Warfare Arsenal, Letters Not Filed (1),” Sparkman House Papers, Hoole.

<sup>67</sup> “Negro Housing Site Considered,” *Huntsville Times*, 29 January 1943, 1.

<sup>68</sup> Enoc P. Waters, “Jim Crow Still in Business ... but Slipping,” *Chicago Defender*, 18 August 1945, 11.

of all women, but particularly African Americans, was “an unknown quantity.”<sup>69</sup> Racial and gendered stereotypes proved formidable boundaries, but the demands of the war helped push officials to overcome their hesitancy. In 1943, arsenal officials concluded negotiations with Atlanta University to hire 100 black female students.<sup>70</sup> When PFC Rice returned to Huntsville, the sight of African American women staffing clerical positions surprised him more than any other change. The sight “almost paralyzed him ... He couldn’t move.” Rice had hoped to settle in Toledo, Ohio, upon discharge, where segregation and prejudice seemed less overt. However, upon witnessing the changes which had come over Huntsville, the private felt that returning home might not be as bad as he had once thought. He would still face discrimination, but “those girls working in the arsenal office make me think things might change.”<sup>71</sup>

Change was certainly a fact of life in Huntsville in the early 1940s. The rapid expansion of the arsenal and the national defense effort placed demands on Huntsville and Madison County’s agricultural economy. As the farms and mills faced increasingly hard times, the government project provided higher pay and better job security. Huntsvillians accepted positions as civilian guards, machine operators, and line foremen; they entered a new workforce in which labor organization was a constant fact of life, job training was a necessary part of the workday, and female and black co-workers shared the morning commute. Southern customs did not disappear. Segregated facilities ensured that little race mixing would occur off of the production line and outside the office, and female employees, white and black, continued to be placed largely in clerical and service positions traditionally considered “women’s work.” Yet Private Rice’s comments are indicative of the ways in which the city began to deal with the new facts of

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<sup>69</sup> Hughes, *Women at War*, 2, 8.

<sup>70</sup> *Ibid.*, 10.

<sup>71</sup> Waters, “Jim Crow Still in Business ... but Slipping,” *Chicago Defender*, 18 August 1945, 11.

economic life. If Huntsville's citizens wanted prosperity, they would have to accept social change, however limited. As the city boomed in the 1950s and 1960s, the transformation became more and more apparent.

Challenges to the southern racial and gender status quo were not the only changes to the North Alabama mill town. Commissioner Loula Dunn of the Alabama Department of Public Welfare noted as much in a speech prepared for Governor Frank W. Dixon in June 1941, a month before the arsenal decision became public. Dunn wrote, "The impact of national defense on local government may well be illustrated by the rapidly changing scope of public welfare services ... In areas where a sleepy village has become a boom town over night, a community or a local government cannot be expected to cope with its problems unaided, but requires the combined effort of all three governmental levels."<sup>72</sup> Huntsville's leaders realized that municipal growth would require quick thinking to accommodate an expanding population. Hundreds of unemployed men flocked to the city, hoping to find a job at the arsenal or at any of the businesses riding the wave of prosperity in the city. Traffic increased substantially, as did demands for city water, electricity, and sewage, taxing an infrastructure unprepared for the influx of people. Yet perhaps the greatest concern came with the demand for housing for the thousands of new employees. City leaders looked to state and federal authorities for home loans, attempting to create a stable community out of the boom conditions surrounding the defense facility. As the arsenal grew in fits and starts, community leaders marshaled their resources to prepare for the rapid growth. The lessons learned from the arsenal's wartime experience proved invaluable in the years to come.

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<sup>72</sup> Dunn to Dixon, 10 June 1941, 1: 6, Frank W. Dixon Papers (Dixon Papers), ADAH.

Coming on the heels of economic depression, the defense boom brought welcome relief across the South. At first, however, the jobs and paychecks were localized in the towns near government facilities, causing a migration of men, women, and children hoping to find work. Huntsville was no exception. By September 1941, just two months after Huntsville learned of its new role, job seekers had become a “serious” problem. The homeless slept in their cars, on the steps of the courthouse, and on benches in the city’s central park. One employee recalled, “The park in the night flickered with cigarettes as well as the usual lightning bugs. A hum of snores mixed with laughter, and singing blended with nature’s choir of frogs and crickets.”<sup>73</sup> Sanitation lagged and crime spiked. Many, unable to find work, were reduced to begging on the street.<sup>74</sup> Those able to find work further troubled city services. Madison Pike, the main road into the arsenal, quickly clogged with workers in the mornings and evenings. Rain made conditions worse, and by March, Huntsville’s leaders looked for state funding in hope of paving all existing roads into the facility and building several new arteries to ease the gridlock.<sup>75</sup> Arsenal officials encouraged workers to use buses, and when public transportation became overcrowded, arsenal employees were told to share rides. Soon, carpooling became a popular strategy for the commute, particularly among workers from outlying communities.<sup>76</sup>

Other city systems faced similar strains. Demands for city water forced leaders to add new pumps to the municipal water system. The City of Huntsville Electric System frantically negotiated with the Tennessee Valley Authority for more power, hoping to maintain a lucrative

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<sup>73</sup> Stephens, *Historic Huntsville*, 109.

<sup>74</sup> “Influx of Destitute Men Creates Serious Problem,” *Huntsville Times*, 17 September 1941, 1.

<sup>75</sup> “Serious Traffic Problem Seen on Roads to Arsenal,” *Huntsville Times*, 22 August 1941, 1; and “Extensive Road Work Planned,” *Huntsville Times*, 6 March 1942, 1.

<sup>76</sup> “Transportation Problem,” *Huntsville Times*, 31 March 1942, 4; and “Arsenal and Local People Alike Try ‘Share-A-Ride,’” *Huntsville Times*, 6 April 1942, 3.

electric contract even as wartime demand forced rate hikes.<sup>77</sup> Huntsville Hospital's Board of Trustees begged the Federal Works Agency for funds, explaining that "hospital facilities were not sufficient to accommodate the increase of business that would be incident to the increase of population." The arsenal's Carroll Hudson seconded the hospital's request, noting that the hazardous nature of chemical weapon construction and the possibility of a major accident at the arsenal "is sufficient reason to consider the hospital addition an absolute necessity for the war effort." Federal funds allowed the hospital to add three additions with 54 new beds.<sup>78</sup> Even Huntsville's public library adapted to meet the arsenal's demands, adding more technical books to be used in training classes. As one librarian noted, "It is no uncommon sight now to see a carpenter, or a plumber, perhaps in overalls, perusing the news periodicals, or struggling with notes on chemistry at one of the reading tables."<sup>79</sup>

The nature of production at the ordnance facility also caused some concern over the environmental impact of the plant, though unlike demands on the hospital, library, roads, or schools, city leaders did little to address such worries. In fact, the lack of action on the ecological disruption that accompanied Huntsville Arsenal's growth says as much about the economic priorities of Valley leaders as their work to obtain federal funds for other infrastructure improvements. Within two days of the formal announcement, Donald Isom, the president of the Tennessee Valley Wildlife Federation, asked Hill to consider the environmental impact of the proposed facility: "Owing to the nature of the refuse from such a plant as this we sincerely hope

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<sup>77</sup> N.M. Payne, Clerk-Treasurer, City of Huntsville, to Sparkman, 27 November 1941, 9: "Huntsville Projects," Sparkman House Papers, Hoole; and Karl Woltersdorf to Sparkman, 5 December 1941, 9: "Madison County: Huntsville Projects, 1939-43," Sparkman House Papers, Hoole.

<sup>78</sup> Dr. Carl Grote to Federal Works Agency, 23 January 1942; Dr. E.V. Caldwell to Sparkman, 23 January 1942; Hudson to Col. W.B. Persons, 13 June 1942; and Brig. Gen. R.C. Ditto to Federal Works Agency, 15 June 1942, 9: "Huntsville Projects," Sparkman House Papers, Hoole.

<sup>79</sup> Jackie McCullough, "Huntsville Public Library Has Place in War Effort," *Huntsville Times*, 2 April 1942, 7.

that a filter or settling pool will not be overlooked in the original plan.” Hill assured Isom that Chemical Warfare Service officials had promised that operations would not harm the local fish and wildlife.<sup>80</sup> Subsequent events proved the senator wrong.

The chemicals produced at the plant were certainly dangerous. As George F. Davis recalled, accidents occasionally led to injuries. In one particularly gruesome case, phosphorus pipes burst, spewing 2,300-degree liquid and burning several people, including some of Davis’s neighbors. Davis transferred to Muscle Shoals after the accident, hoping to avoid being “blown up.”<sup>81</sup> John McDaniel, hired in 1942 to manufacture mustard gas remembered the danger:

To do this work, it would be necessary for me to wear clothes impregnated with a substance to prevent the mustard gas fumes from coming in contact with the skin. The long johns underwear were thick with the substance, as were the socks, coveralls, shoes and hat. I have scars today on my wrists where I was careless in joining the underwear sleeves and the gloves. A gas mask completed the uniform. Sensitive skin was not a particular advantage since the showers used kerosene to remove any mustard or vapor contamination from the body.<sup>82</sup>

Assured that the arsenal’s production lines were safe, the city did little to ensure that workers contained the chemicals on the reservation. In fact, the importance given to the arsenal’s output meant that any environmental concerns came second to defense needs; as arsenal commander R.C. Ditto told Sparkman, conservation officials in Madison County understood that the “production of the Arsenal had to come first.” Not all Huntsvillians were

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<sup>80</sup> Isom to Hill, 5 July 1941, 113: 81, Hill Papers, Hoole.

<sup>81</sup> Lowe, Interview with Davis, 21 November 1990, 2: “George F. Davis,” Oral History Records, TVA Records, NARASE.

<sup>82</sup> Stephens, *Historic Huntsville*, 108.

acquiescent. Louis Collier complained to Sparkman that indiscriminate dumping had “robbed us of a considerable area for hunting and fishing” and promised to ruin any chance of using the surrounding land after the war. In fact, despite claims of safety, Collier witnessed dead fish floating down Indian Creek, obviously originating from the arsenal reservation. Sparkman contacted officials, who promised the congressman that water was analyzed “almost hourly” to ensure low concentrations, though some instances of contamination “while regretted, are unavoidable and incident to war.”<sup>83</sup>

In 1947, a year after production ceased, Colonel Sterling E. Whiteside, Jr., finally commented on the periodic fish kills that occurred on both Indian Creek and Big Spring Creek. Despite “continuous and tedious” precautions, he admitted, some chemicals escaped safety mechanisms. Huntsville’s industrial sewer system simply did not have the catch basins needed to keep pollutants out, especially since upgrades would cost the government \$400,000.<sup>84</sup> The shift to missile production did little to lessen the impact of the government facility on the environment, though increased public attention did bring to light the challenge Huntsville faced in attempting to balance prosperity and ecological safety.

Huntsville faced the greatest adjustment to its booming economy in the area of housing. Flooded with new employees and their families, the city struggled to provide affordable rental housing to meet the rapidly increasing demand. Housing prices and rents skyrocketed within days of the announcement, and the Alabama congressional delegation moved quickly to secure funding for a federal housing development that might take pressure off of the city. The Madison County Defense Council called for more homes, and city and county officials requested \$2.5

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<sup>83</sup> Collier to Sparkman, 24 September 1943; and Colonel Marshall to Sparkman, 8 October 1943, 17: “Huntsville Matters: Huntsville Arsenal, 1943-5,” Sparkman House Papers, Hoole.

<sup>84</sup> “Saving Fish in Arsenal Creeks No Simple Task,” *Huntsville Times*, 22 June 1947, 14.

million to expand “all public facilities,” a sure sign that the city was unprepared for the population increase.<sup>85</sup> Sparkman appealed to his constituents, asking renters and sellers to “be sane and sensible” and avoid gouging. He warned, “There will be a day of reckoning for those who engage in excessive speculation.”<sup>86</sup> The confusion recalled the days of the Ford offer at Muscle Shoals, as the “flood” of job seekers left “old Huntsville” in “the throes that come to boom towns.”<sup>87</sup> Claude H. Pipes, the manager of the Huntsville Chamber of Commerce, asked Sparkman to help get the city declared a “defense area,” allowing homebuilders to access federal funds and, more importantly, rationed building materials in order to meet the demand. The chamber fielded hundreds of requests for homes each day, and Pipes worried that the real “rush” had not yet occurred. The congressman promised that the federal government could carefully survey the city’s housing needs, but Huntsville could not wait on surveys.<sup>88</sup>

A week after making the request, the city advised residents to “fix up” any old or abandoned property to prepare living quarters for renters. The Farm Security Administration, which helped provide housing for farmers dislocated from the arsenal reservation, provided twenty government trailers, the first of over 300 that went to defense workers. In a speech to the Conference of American Governors, Alabama’s Frank Dixon enunciated Huntsville’s concerns: “[These] governments are faced with the overnight creation of boom towns ... The spiral of high rents and high prices already beginning to prevail is one which brings sleepless nights to our public officials.” By February, Huntsville’s rents were 23% higher than pre-war levels.<sup>89</sup> City,

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<sup>85</sup> “Word of Caution,” *Huntsville Times*, 6 July 1941, 4; “City to File Plea for Aid on New Needs,” *Huntsville Times*, 16 July 1941, 1; and “Millions Asked for Expansion in Huntsville,” *Huntsville Times*, 18 July 1941, 1.

<sup>86</sup> “Sparkman Warns to Be Sensible,” *Huntsville Times*, 20 July 1941, 2.

<sup>87</sup> “Booming Huntsville,” *Huntsville Times*, 8 September 1941, 4.

<sup>88</sup> Pipes to Sparkman, 19 September 1941, 9: “Huntsville Projects,” Sparkman House Papers, Hoole.

state, and federal leaders adapted in order to meet the demands that came with defense development.

Relief came in February 1942, when the Federal Works Agency sent an assistant administrator to the city to oversee the construction of 300 permanent homes at a cost of \$3,750 per house. The county board of commissioners approved a new subdivision west of the city, specifically designed to house arsenal employees. In April, the Office of Price Administration officially designated Madison County a “defense area,” allowing officials to set rent at April 1941 levels and provide assistance for tenants facing inflated rates.<sup>90</sup> The next month, a House committee began formal investigation into defense migration across the South, determined to discover “exactly what has happened to change dozens of sleepy, happy-go-lucky Southern towns into hectic, overcrowded modern versions of a gold rush.” Arsenal officials R.C. Ditto and Carroll Hudson spoke to the inquiry, giving projected employment figures. Ditto defended his staff, which he felt was “cooperating splendidly” with community leaders trying to update and expand city services and facilities. On a visit, John H. Tolan, the Democratic California representative who chaired the committee, praised the city for adapting “more efficiently and quietly [to] the impact of its war projects than has any other defense center I have visited.”<sup>91</sup>

Tolan was perhaps overly optimistic. In fact, Huntsville struggled to adjust to defense conditions throughout the 1940s and 1950s. Arsenal workers collected paychecks, but rising prices ensured that the increased prosperity would not reach all Huntsvillians equally. As the *Huntsville Times* noted, both white and black workers in the lower pay scales “have not enjoyed

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<sup>89</sup> Dixon, “The States and National Defense,” [ca. 1942], 4: 3, Dixon Papers, ADAH.

<sup>90</sup> “Agency Speeds Housing Plans,” *Huntsville Times*, 17 February 1942; “Early Relief upon Housing Problem Seen,” *Huntsville Times*, 20 March 1942, 1; and “Rent Committee Promises Action,” *Huntsville Times*, 30 April 1942, 1.

<sup>91</sup> Jacqueline McCullough, “Facts Placed Before House Group Today,” *Huntsville Times*, 7 May 1942, 1, 4; and “Tolan Praises Huntsville for Defense Conditions,” *Huntsville Times*, 10 May 1942, 1.

wage or salary increases at all comparable to the income enjoyed by those employed at these concerns. Rents have gone up, food has increased, clothing has advanced. They have been caught between the upper and nether millstones. The last few months have ground them.”<sup>92</sup> Rent control certainly helped housing costs, but rising prices affected more than just homes and apartments. City leaders welcomed the arsenal as economic relief, but rising wages brought localized inflation. Government action came too late to help many still struggling to turn their earnings into a better life; rent control was simply the government “rushing in to lock the stable after the horse has escaped.” The housing situation pointed to the mixed benefits already apparent a year after the celebrations that marked the arsenal’s coming.<sup>93</sup>

Housing problems plagued Huntsville’s leadership throughout the war. When the arsenal added several hundred jobs in September 1942, the influx of new workers combined with rubber shortages (causing a lack of tires that prevented many from commuting) to boost demand. Housing project managers told city officials that houses were occupied as soon as constructed, and that many had waiting lists for homes. Those Huntsvillians not employed at the arsenal faced even stiffer competition, since they were ineligible for defense housing.<sup>94</sup> In June 1943, officials ordered 150 occupants of the government trailer park to vacate the camp in the hope that the renters would move to vacant Federal Housing Authority homes scattered across the city. Even though many took advantage of the defense housing, most of the inhabitants could not afford the mandatory move. War production salaries “will not allow them to pay the prices demanded for rent of available houses.”<sup>95</sup> Continued housing problems also affected the

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<sup>92</sup> “The Rent Situation,” *Huntsville Times*, 17 May 1942, 4.

<sup>93</sup> “The Rent Situation,” *Huntsville Times*, 1 July 1942, 4.

<sup>94</sup> “Housing Problem Acute Once More,” *Huntsville Times*, 8 September 1942, 1, 8.

<sup>95</sup> Telegram, A.L. Essman to Sparkman, 1 June 1943, 9: “Huntsville Projects,” Sparkman House Papers, Hoole.

arsenal's output. As *Huntsville Times* Editor Reese Amis noted, the lack of affordable housing near the arsenal led to an absentee rate approaching 10%. City leaders Beirne Spragins and Charles Shaver contacted the FHA representative in Montgomery, hoping to lower rents. Told that "exactly nothing could be done," Spragins and Shaver called on Hill and Sparkman to "hurtle [sic] the red tape" and move unoccupied housing in outlying subdivisions onto the government reservation. In the meantime, Spragins, Shaver, Amis, Mayor A.W. McAllister, and several others formed a committee to meet with businessmen and government officials to discuss the problem, concluding that while upper-level housing was available throughout the county, 70% of the city's labor force needed low-rent options. Sparkman promised to discuss the situation with the National Housing Authority, but thought moving the houses was too "impractical."<sup>96</sup>

As late as 1945, housing continued to trouble Huntsville's city leaders. Sparkman pressed the NHA for money for additional housing near the facility, though federal officials feared housing needs might be "temporary" and that any allocated money would be used simply for additions to existing quarters. As Madison Town Clerk J.C. Gormley noted, however, the wartime demand had not slackened: "Since work started at the arsenals there has been a great demand for houses at Madison and every available room here has been occupied and a large number of garages have been remodeled into living quarters and each one has a waiting list."<sup>97</sup> Despite cooperation from the federal government, Huntsville's leadership never balanced the supply of low-rent accommodation with the demand from the city's workforce. During the

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<sup>96</sup> Amis to Sparkman, [ca. April 1944]; Spragins to Sparkman, 29 April 1944; Spragins to Sparkman, 29 April 1944; Herbert Johnson to Sparkman, [ca. 1944]; Sparkman to Spragins, 3 May 1944; and Sparkman to Spragins, 11 May 1944, 17: "House Matters: Huntsville Arsenal and Redstone Arsenal," Sparkman House Papers, Hoole.

<sup>97</sup> Gormley to Sparkman, 16 January 1945; Robert K. Creighton to Sparkman, 24 January 1945; and Gormley to Sparkman, 26 January 1945, 9: "Madison County: Madison County Housing Authority," Sparkman House Papers, Hoole.

initial boom, the chamber of commerce struggled to find adequate housing, yet even when subdivisions sprang up around the city, housing remained scarce for low-wage labor.

Considering the speed with which the arsenal located, the community did all it could to meet demands. Yet as the city continued to grow in the postwar years, the leadership had ample time to build on its wartime experiences. By the 1950s, the Huntsville Chamber of Commerce was better prepared to adjust to the city's continued economic development.

By 1943, the Huntsville Arsenal was in full production. The facility's mortar shells and smoke pots helped disguise U.S. ground operations in North Africa. The "goop" bombs carrying highly flammable chemicals later set Japanese cities alight; as Secretary of War Robert Patterson noted after the war, "The blackened shambles of Tokyo, Yokohama, Osaka, and other Japanese war centers presented graphic testimony to the made-in-America fires that rained from the skies." The plant produced nearly twenty railroad car loads of finished ammo each day, totaling millions of rounds over the course of the conflict.<sup>98</sup> Yet even as the arsenal helped win the war, Huntsville's community leadership turned its attention to peacetime concerns. Government representatives and arsenal officials consistently promised that the facility would continue serving well into the postwar world, but across the city and throughout the Tennessee Valley, businessmen worried that the booming prosperity inspired by government defense work would disappear just as fighting men and women returned home looking for work. As the fortunes of Huntsville Arsenal flagged and the war effort slowed, the concerns convinced the city's leaders to work more forcefully to bring industrial development to the region. Amidst calls for industrial

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<sup>98</sup> "4.2 Mortar Shell, Smoke Pots of Arsenal Praised," *Huntsville Times*, 21 October 1943, 3; "Arsenal's Great Part," *Huntsville Times*, 8 July 1945, 4; "Arsenal Products Win Praise from Patterson," *Huntsville Times*, 14 April 1946, 14; and "Redstone Output Totals Revealed at Anniversary," *Huntsville Times*, 29 March 1945, 3. Patterson, who had been Under Secretary of War under Roosevelt, was promoted to Secretary of War by Truman in 1945.

diversification, Huntsville's leadership tentatively embraced a new economic direction for the old mill town. Building on the success of defense production, the city pushed for diversified industry as a way to create prosperity.

In late 1942, Marion Caskie, Vice-President of Reynolds Aluminum, wrote to Senator Hill, who helped his company locate near Sheffield. Caskie expressed concern that the defense contracts helping run southern industry would dry up as soon as victory came in sight. He feared that the "post-war problems of business can not [sic] await legislative solution until the war is over." Only with immediate study and action could businesses prepare for peacetime conversion without an intervening time of massive unemployment and economic dislocation. For his part, Caskie asked Hill to collect funds to help private enterprises continue operations until consumption returned to wartime levels.<sup>99</sup> While eminently self-serving, Caskie's solution hinted at the concerns many in the business and government community faced when planning for life after the war. The production of planes, tanks, ships, weapons, and supplies by both government facilities (like Huntsville Arsenal) and private companies running on government contracts (like Reynolds Aluminum) had created a new way of life for many in the Tennessee Valley. Their sudden disappearance would cause an economic catastrophe unless local leaders could build a new industrial foundation for future growth.

The *Huntsville Times* echoed those concerns in 1943, running three "postwar objectives" on its editorial page for the remainder of the war. The city needed to complete a regional airport, a new highway to attract both commercial and tourist traffic, and, most importantly, to convert the "unneeded portions" of the arsenal reservation in preparation for use by private industry. The paper stated the problem in no uncertain terms: "[The arsenals] have wrought a vast change in this whole area ... But the war will be over some day, perhaps sooner than a great many believe.

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<sup>99</sup> Caskie to Hill, 28 September 1942, 130: 341, Hill Papers, Hoole.

These arsenals then will largely close down. Most of the local labor that has been employed in them will be without jobs.” Such pessimism had largely been absent for the past two years as Huntsville Arsenal and Redstone Ordnance Plant steadily increased production, but the time had come for a practical assessment.<sup>100</sup>

Across the nation, government agencies worried about the transition from a wartime to a peacetime economy. Huntsville provided a perfect opportunity for speculation, and in 1943, the Department of Labor released statistics on the city’s wartime growth and recommendations for its future. Researchers called the city “an outstanding example of how drastically war has changed the peacetime way of life in a large number of areas.”<sup>101</sup> With the end of the war in sight, government officials worried that decreasing employment at Huntsville Arsenal threatened severe dislocation for the area. Ordnance workers needed jobs, but cotton mills would not return to pre-depression levels, and the location of the arsenal reservation ensured that many former farmers would not be able to return to the fields. The report painted a grim picture for the newly unemployed: “The end of the war will find them no longer spread abroad, but lodged in numbers in such centers as Huntsville, and many will have no work to which to turn.”<sup>102</sup> For the city to survive, the government would have to help Huntsville address its problems. The report noted, “Whether it will require action to reestablish small farmers on the land, to employ the unemployed until private industry can make room for them, or to do whatever else Congress may decide to do, that responsibility is an obligation owed to Huntsville by the national Government.”<sup>103</sup>

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<sup>100</sup> “Postwar Objectives,” *Huntsville Times*, 24 October 1943, 4.

<sup>101</sup> United States Department of Labor, Bureau of Labor Statistics, “Impact of the War on the Huntsville Area,” July 1943, 1, in Hoole.

<sup>102</sup> *Ibid.*, 20.

At the state and local level, leaders began to discuss their own role in reconversion. The Alabama State Planning Board, while generally optimistic about industrial growth after the war, fretted over the potential for dislocation in war industry communities. Huntsville, Anniston, Childersburg, Gadsden, Birmingham, and Mobile anticipated “localized problems” as defense plants attempted to convert to peacetime uses.<sup>104</sup> In a letter to Congressman Sparkman, J. A. Senter, a General Development Agent for the Nashville, Chattanooga, and St. Louis Railroad (which had rail lines connected to the arsenals) best captured the anxiety that already worried city leaders: “When the war is over, I am very much afraid that the Huntsville operation will close down, throw a great many people out of work, and necessitate the securing of an industry to take up this labor loss, or we will find deplorable conditions existing in that section.”<sup>105</sup> As Huntsville soon discovered, reconversion was a long, tortuous process.

The city received its first scare in August 1943, when Concan Ordnance Company began negotiating to assume control of the arsenals.<sup>106</sup> Weeks before, TVA Board Member Raymond Paty told Sparkman of the overwhelming need for postwar planning in the Valley, particularly “prompt conversion of war plants to peace-time production,” but the Concan negotiations caught the congressman by surprise.<sup>107</sup> Sparkman immediately contacted Under Secretary of War Patterson, expressing fears that privatization would decrease employment, impair morale (since

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<sup>103</sup> *Ibid.*, 3.

<sup>104</sup> Alabama State Planning Board, “Alabama Postwar Employment Prospects,” September 1944, 2-4, SG12500: 1, Sparks Administration Files, ADAH.

<sup>105</sup> Senter to Sparkman, 3 November 1943, 15: “House Miscellaneous, Decentralization of Industry,” Sparkman House Papers, Hoole.

<sup>106</sup> In some ways, the Concan negotiations exhibited the convoluted nature of wartime bureaucracy. While Huntsville Arsenal answered to the Chemical Warfare Service, Redstone fell under the jurisdiction of the Ordnance Department. While there seems to be no recorded conflicts between the two organizations at the Huntsville facility, correspondence necessarily followed a convoluted path during times of crisis, as the Concan incident clearly showed.

<sup>107</sup> “Speakers Offer Post-War Plans,” *Huntsville Times*, 5 August 1943, 1.

workers would no longer be directly employed by the national war effort), and cost the government money. Patterson's office agreed that some changes would occur, perhaps even some downsizing, but officials promised that as many workers as possible would be transferred to similar jobs in defense or other private industries. Major General L.H. Campbell tried to assure Sparkman and his constituents, noting that Concan "has an efficient and successful record as an operator of a similar plant."<sup>108</sup> In fact, by 1943, many government facilities were beginning to privatize, hoping to free military personnel for active duty. Anniston's defense facility announced a deal with Chrysler, and while the discussions in Huntsville remained "mystifying," the city soon warmed to the idea that the arsenals would continue employing local workers, even if at reduced levels.<sup>109</sup> In November, the agreement fell apart. The War Department announced that "conditions had changed" because, as Sparkman confided to Reese Amis, the private company was afraid that the workforce "wouldn't stick." Both men were relieved. Amis called the failed deal "good" and the congressman confided, "I felt the other arrangement was a mistake."<sup>110</sup> The arsenals remained government facilities, but the Concan scare served to convince many in the city to become more proactive in preparing for economic life after the war. In the coming months, city leaders took important steps to ensure that regardless of changes at the arsenal, Huntsville's new way of life would persevere.

In late September 1944, the Huntsville Chamber of Commerce formed the Huntsville Industrial Expansion Committee (HIEC), composed of its more business-savvy leaders and

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<sup>108</sup> Sparkman to Patterson, 24 August 1943; Howard C. Peterson to Sparkman, 28 August 1943; and Campbell to Sparkman, 2 September 1943, 17: "House Miscellaneous: Huntsville Arsenal and Redstone Arsenal," Sparkman House Papers, Hoole.

<sup>109</sup> "Private Firm to Take Over at Redstone," *Huntsville Times*, 3 September 1943, 1; and "Matter of Policy," *Huntsville Times*, 5 September 1943, 4.

<sup>110</sup> Amis to Sparkman, [early November 1943]; Sparkman to Amis, 8 November 1943; Amis to Sparkman, [mid November 1943]; and Sparkman to Amis, 19 November 1943, 17: "House Miscellaneous: Huntsville Arsenal and Redstone Arsenal," Sparkman House Papers, Hoole.

began planning for a peacetime economy that might, or might not, include Huntsville Arsenal and Redstone Ordnance Plant. The committee's first act was a subscription drive, asking local businesses to donate money to be used in its campaign to bring new industries to Huntsville. In June 1945, John Blue, the owner of an eponymous North Carolina farm implement factory, decided to move his business to Huntsville. A month later, the General Shoe Corporation of Nashville, Tennessee, occupied one of Huntsville's old mill properties. The chamber of commerce and its industrial expansion group worked out the deals that brought both companies to Huntsville. In early 1946, the HIEC began taking interested industrialists on tours of available properties and boasted a membership of over 200 and a bankroll of \$25,000.<sup>111</sup> The future was bright for Huntsville, even as the defense facilities scaled down production and released workers.

Early on, the campaign found support in Washington, especially from Congressman Sparkman. In May 1946, George Mahoney, who had been elected president of the HIEC, and Sparkman used their influence to help Barrett Shelton locate Wolverine Tube Company to nearby Decatur. The company praised Sparkman's efforts. He also worked to provide the resources by which Huntsville could sell itself to larger companies. In April, he obtained a contract with a natural gas company, getting a line run to Huntsville to provide the city with access to gas, which would assist the city in negotiations with large industries.<sup>112</sup> In 1949, Congressman Bob Jones worked with locals to show the arsenal properties to industries looking for plant sites.<sup>113</sup> Huntsville's federal representatives lent their influence in the drive to

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<sup>111</sup> "Several Firms Seeking Sites in Huntsville," *Huntsville Times*, 17 February 1946, 1, 10.

<sup>112</sup> H.Y. Bassett, General Manager, Wolverine Tube Division, to Sparkman, 14 October 1946; Sparkman to W.R. Hudspeth, 13 April 1946, 9; Madison County, Huntsville Projects, 1944-6, Sparkman House Papers, Hoole.

<sup>113</sup> T.D. (Tom) Johnson, North Alabama Associates, to Jones, 30 March 1949, 42:760, Bob Jones Papers, UAH.

diversify the city's economy. When the threat of closure drove the city to action, the HIEC found willing assistance in Washington that helped pave the way to industrial growth.

The group's first substantial push for industry came in November 1946 with the publication of "Huntsville Has What It Takes." The brochure, designed by the HIEC in consultation with Tennessee Valley Authority officials, set out the benefits of locating industry in Huntsville and served as the city's main promotional tool in contacts with interested companies. Detailed descriptions of Huntsville's resources were prefaced by testimonials from the city's leading industrialists, including Carroll Hudson, General Shoe's James A. Jackson, and a letter from John Blue himself. Jackson and Hudson praised North Alabama labor that "readily adapts itself to the manufacturing industry," and Blue specifically thanked the HIEC for helping his company locate in Huntsville.<sup>114</sup> The pamphlet's authors stressed the physical and cultural resources available throughout the Tennessee Valley, but its focus was the area's labor supply. The HIEC described local manpower as fully trained, thanks to the arsenals; in doing so, the committee revealed its fears of a future without the government projects: "An estimated 90 percent of this tried and tested personnel is still on the scene – most of it going back to its farm and city homes in the area. It is available for Huntsville's new industries."<sup>115</sup> Seeking a diversified economy to relieve the city's dependence on the government arsenals, "Huntsville Has What It Takes" provided both a sales brochure and a window to the concerns of city leaders for their area economy.

Even as the HIEC worked to bring new industries to the city, the arsenals began to scale back activity. In August 1945, the arsenals began cutting contracts, eventually dropping \$97 million worth of work in the weeks following the war. Huntsville Arsenal furloughed 1/3 of its

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<sup>114</sup> "Huntsville Has What It Takes," Huntsville Industrial Expansion Committee, 1946, 4, Hoole.

<sup>115</sup> *Ibid.*, 17.

workers (mostly women), and Redstone dropped to a 40-hour week.<sup>116</sup> Soon, city leaders faced the problem of employing the workers that once filled the arsenals, as well as returning veterans and those displaced from the farm economy. By November, when the HIEC pamphlet arrived in Huntsville, the number of unemployed around the city reached 4,000.<sup>117</sup> Some industries took advantage of the arsenal properties, including the American Rubber Company and the Keller Motor Corporation, but the nature of the arsenals' chemical work made the transition to private industry difficult. Many buildings were contaminated, and some property on the reservation had to be fenced off due to excess chemical corruption. In December, the arsenal properties were declared surplus and listed for sale.<sup>118</sup> The *Huntsville Times* tried to remain optimistic, promising that the arsenal properties would allow "large private industries" to locate in the area (even though leasing had failed to find industries willing to move into the properties), yet the optimism belied the lengths to which those most concerned with Huntsville's economy went to try to keep the arsenals active.<sup>119</sup>

In February 1947, only a skeleton crew remained at the government reservation. A gas mask plant which had temporarily occupied Huntsville Arsenal closed, laying off 280 workers. Only 241 workers and three officers remained as a "reserve ordnance arsenal" and administrative force at Redstone.<sup>120</sup> Placed on standby, the facility eventually employed nearly 1,500 civilian

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<sup>116</sup> "Both Arsenals Cut Contracts for Materials," *Huntsville Times*, 16 August 1945, 1; "1,850 Workers to Be Granted Furlough Soon," *Huntsville Times*, 22 August 1945, 1; "Local Arsenal Cancellation is \$97,000,000," *Huntsville Times*, 2 September 1945, 1.

<sup>117</sup> "4,000 Unemployed around Huntsville," *Huntsville Times*, 3 October 1946, 1.

<sup>118</sup> "Redstone Arsenal Given Standby Status Order," *Huntsville Times*, 24 February 1947, 1; "Rubber Firm Starts Line 6 Production," *Huntsville Times*, 11 May 1947, 1; "Keller Corp. Taking Over Arsenal Site," *Huntsville Times*, 7 October 1947, 1, 3; "Arsenal to Become Surplus," *Huntsville Times*, 17 December 1947, 1, 4.

<sup>119</sup> "The Arsenal's Passing - Gain or Loss?" *Huntsville Times*, 21 December 1947, 4.

<sup>120</sup> "Arsenal Gas Mask Plant Will Close," *Huntsville Times*, 10 September 1946, 1; and "Redstone Arsenal Given Standby Status Orders," *Huntsville Times*, 24 February 1947, 1.

and military workers for “maintenance and upkeep,” but compared to a wartime peak of nearly 17,000, the immediate postwar employment was a severe disappointment for those hoping the arsenals would become a permanent fixture of Huntsville’s business community.<sup>121</sup> As the HIEC worked to bring in new industries to take the place of defense jobs, Sparkman, Jones, and Hill held a series of meetings with Secretary of the Army Kenneth Royall in an attempt to convince him to retain the facilities. Sparkman pointed to a series of personal investigations that proved the cost to keep Huntsville Arsenal active was comparable to the cost of any other chemical warfare arsenal. He argued that “conditions” in the Tennessee Valley, particularly “power and water,” outweighed those of any other potential site. City leaders made hurried appeals to Army officials, voters flooded Hill’s office with petitions, and the HIEC begged arsenal leaders to keep the facilities active.<sup>122</sup>

Despite the heavy push for a diverse economy, civic boosters realized the importance of the defense project, no matter how anemic it seemed in comparison to its booming wartime business. Negotiations with Royall failed and the disappointment of Huntsville’s business leadership was palpable, but the *Huntsville Times* tried to find a silver lining. The “passing” of the government facility “brought regrets from most, some fear and trepidation to many, and a feeling of relief to others, that the issue finally is settled.” The gradual nature of the closing helped “cushion the shock.” In fact, the vacant facilities constituted a valuable infrastructure with water, power, and transportation connections that would make industrial occupation that much easier. As groups like the HIEC continued to contact private industries, eliciting interest in

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<sup>121</sup> “Standby Use of Arsenal Is Ordered,” *Huntsville Times*, 29 May 1947, 1, 4.

<sup>122</sup> Press Release, “Sparkman Urges Hold-up in Disposal of Surplus War Plants,” 2 April 1948, 66A677-23: 31, Sparkman Senate Papers, Hoole; “Mayor, Cummings to Push Arsenal,” *Huntsville Times*, 10 October 1947, 2; “Redstone Due on Permanent, Reduced Basis,” *Huntsville Times*, 21 September 1947, 1. For voter petitions, see 187: 168, Hill Papers, Hoole.

the old arsenal grounds, the government's departure might even "prove to be a blessing in disguise," the newspaper hoped.<sup>123</sup> The closure of the arsenals highlighted both the importance of a diversified economy, and the fear that the campaign for diversity would not be enough to stave off economic disaster.

In January 1948, the city moved to catalogue the resources on the arsenal reservation, hoping to list the water systems, sewer lines, dock facilities, fire-fighting equipment, highway construction equipment, school buildings, hospital, electric transmission equipment, rail lines, and airport facilities that were available for interested parties.<sup>124</sup> A number of organizations expressed a desire to use at least part of the facility. Some, like Keller Motors or Solvay Chemical, brought jobs to the city, though they employed a miniscule percentage of arsenals' numbers. Others hoped to use the expansive reservation for more constructive purposes. The U.S. Public Health Service visited the city to assess the feasibility of turning the administration area of Redstone Arsenal into a regional tuberculosis sanitarium.<sup>125</sup> J.H. Crow, Jr., asked Bob Jones for permission to purchase barrack buildings for Sunday school rooms for his church. Superintendent W.G. Hamm of the Huntsville Public School System planned to purchase parts of the old arsenal to buttress the crowded educational facilities, and L.H. Pinkston of the Huntsville Chamber of Commerce began working with the Alabama State Department of Education to use the old arsenal headquarters as a trade school, training the newly unemployed to work in incoming industries.<sup>126</sup>

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<sup>123</sup> "The Arsenal's Passing – Gain or Loss?" *Huntsville Times*, 21 December 1947, 4.

<sup>124</sup> Huntsville City Council, "Resolution No. 4-H," 8 January 1948, 187: 169, Hill Papers, Hoole.

<sup>125</sup> "Group to Visit Arsenal for TB Hospital Study," *Huntsville Times*, 4 January 1948, 2.

<sup>126</sup> Crow to Jones, 12 January 1948, 236: 3443, Bob Jones Papers, UAH; Hamm to Hill, 17 January 1948; and Pinkston to Hill, [ca. 1948], 187: 169, Hill Papers, Hoole.

The numerous visions for the future of the reservation provided ample room for compromise and conflict. The HIEC led the campaign to occupy the abandoned facilities with a private industry, and many pointed to the demand for industry as a rationale for on-the-job training programs. Veteran A.L. Smith argued that the goals were mutually inclusive, since a school would train the very skilled workers needed to attract factories to the city. The *Huntsville Times* agreed, promising that a trade school “would fit in admirably with the industrialization that will soon take place at the arsenal.”<sup>127</sup> Yet as groups like the chamber of commerce and the HIEC pushed for specifically industrial uses, their demands angered the educational and medical communities. Chamber officials asked Bob Jones to discuss the facilities with the superintendent and county health board. If Huntsville passed on the hospital, it could be placed in Decatur, but if the city missed the industrial opportunity presented by the arsenals’ decommission, the community would truly suffer. Amis admitted that he kept news of the hospital out of the *Huntsville Times* and promised Jones that upkeep of a sanitarium would “eat us up.” Instead, the trade school would “fill a long-felt need for all these counties,” and better yet, would be funded by the state.<sup>128</sup> The debate over use of the properties reflected the continued discussion over the future of the Valley economy, and once again, the business leadership pressed for the continued industrial transformation of the region. Led by the HIEC and supported by the community leaders, Huntsville prepared to use the abandoned government facilities to bring in businesses that would employ locals and add to municipal coffers.

In April 1949, the War Department announced that a “major portion” of the Huntsville Arsenal facility would be sold. An Army Corps of Engineering Survey listed 350 buildings on

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<sup>127</sup> A.L. Smith to Jones, 9 February 1948, 236: 3443, Bob Jones Papers, UAH; and “Trade School at Arsenal Would Be Ideal,” *Huntsville Times*, 11 March 1948, 4.

<sup>128</sup> Pinkston to Jones, 15 March 1948; and Amis to Jones, 18 March 1948, 236: 3443, Bob Jones Papers, UAH.

36 tracts of land, including some 20,000 acres of farming land. Some farmers, forced off of the land almost a decade before, had hoped to be given the right to return to their land (despite the chemical contamination), but the Army announced that the former owners would receive no preference for resale. Finally, on July 3, 1949, eight years to the day after the announcement that changed Huntsville's economy, the Army transferred command for Huntsville Arsenal, its 270 employees, and the majority of its remaining holdings to the Ordnance Department's Redstone Plant. The rest of the facility was "washed out" (i.e. decontaminated) and handed over as well.<sup>129</sup> The government facility became Redstone Arsenal, the name it still carries, but the transition was symbolic as well. Huntsville Arsenal had been the flagship of the defense effort in the city, and its final deactivation presaged the end of the remarkable growth that had characterized its early years. Across the Valley, communities prepared to recreate the defense boom by attracting industries that could bring renewed prosperity. In Huntsville, however, such economic development largely remained dependent on the fortunes of government contracts and the ability of the community's business leadership to best utilize federal investment.

The defense boom that occurred in the South during World War II escalated the changes to the Valley that had begun in the years following World War I. At Muscle Shoals, government plans to build a defense facility spurred the local community to look beyond its agricultural past toward a new economic future, marked by the introduction of diversified manufacturing. The project stalled, but communities like Florence continued to push for industrial development, hoping to offset the inactivity caused by congressional infighting. In the wake of a crippling depression, the Tennessee Valley Authority again convinced Valley residents that economic

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<sup>129</sup> "Huntsville Arsenal to Be Sold," *Huntsville Times*, 25 April 1949, 1, 4; "Plans for Huntsville Arsenal," *Huntsville Times*, 30 June 1949, 4; and "Deactivation of Huntsville Arsenal Made," *Huntsville Times*, 3 July 1949, 1.

revitalization meant renewed opportunities for industries, particularly in Decatur, where the city leadership combined natural resources and government connections to attract a number of plants. At Huntsville, the production demands of a two-front war brought boom conditions and two government plants. Tens of thousands were hired, and the money from the arsenals' payrolls reversed nearly a decade of economic trouble caused by the collapse of the city's cotton mills. City leaders and their congressional representatives worked diligently to bring the investment home, but their work did not end when the government decided to locate in the Valley. The community faced an immediate series of transitions. Women and African-Americans took positions in the new plant, temporarily gaining the opportunity to participate more fully in the economy as the war drained manpower. An influx of workers and job seekers severely taxed the city's infrastructure, demanding an expansion of city services and hundreds of new homes. Yet even as the war raged, the uncertain nature of the arsenal convinced Huntsville's business community that further economic development was needed to preserve the city's newfound prosperity. With the creation of the HIEC, the city's leaders attempted to do what Florence and Decatur had tried before: attract industries to balance government investment. In the 1950s, renewed government attention provided further opportunity to pursue that goal.

## CHAPTER 9

### “The City that Space Built”: Huntsville, 1950-1965

As Redstone grows, so grows Huntsville.<sup>1</sup>

By late 1948, Huntsville faced the beginnings of an economic crisis. A number of smaller companies had leased land on the now-defunct arsenal reservation, but neither their employment nor their paychecks approached wartime levels. Keller Motor Company perfectly exemplified the changed nature of activity on the reservation. Hubert Mitchell, a Hartselle, Alabama, businessman, inventor, and entrepreneur, founded the company in 1947 with George Keller, who had worked as a salesman in a Studebaker factory for nearly thirty years. Keller and Mitchell incorporated their company and leased one of the largest buildings in the former Huntsville Arsenal facility to fabricate the Keller Chief and Keller Super Chief, both “lightweight economy cars.”<sup>2</sup> The company seemed destined to succeed. By 1947, returning veterans were participating fully in the consumer economy and cheap family cars were a necessity for the booming suburban American middle class. Yet Keller Motors failed to reach its potential. The Huntsville facility never staffed more than a skeleton crew of less than 100 workers. When Keller died of a heart attack in 1949, the company collapsed. Major American

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<sup>1</sup> Title quote from “The City that Space Built,” *U.S. News and World Report* (12 November 1962), 72-4, 66A89-4: “Econ. 2, Industry,” Sparkman Senate Papers, Hoole. Introductory quote from “As Redstone Grows ...,” *Huntsville Times*, 21 November 1956, 4.

<sup>2</sup> “Keller Corp. Taking Over Arsenal Site,” *Huntsville Times*, 7 October 1947, 1, 3; For a detailed history of the Keller Motor Corporation, see Ken Gross and Rich Taylor, “America’s Most Needed Car: The Story of the Keller Super Chief,” *Special Interest Autos* (Sept./Oct. 1975), 31-40, 59, reprinted in <http://www.redstone.army.mil/history/auto/auto.html>.

automakers like Ford and General Motors quickly increased production to take advantage of rising postwar demand, leaving Keller little more than an anachronism – a local company unable to compete in a national market.

Huntsville longed to take part in the postwar boom that had promised so much for Keller and Mitchell. Veterans returned ready to participate in the new economy, only to find that the end of fighting also meant an end to the demands of defense production. Across the South, local and state governments and civic organizations struggled to fill the space, physical as well as economic, left by departing arsenals, camps, and factories. In the Tennessee Valley, that task largely fell to two groups, both with experience in community growth and development. The congressional delegation, led by senators Lister Hill and John Sparkman, had an impressive résumé with marked successes, including Huntsville Arsenal and the myriad companies which had located around Florence and Decatur in response to the coming of TVA. Their new colleague, Representative Robert E. “Bob” Jones, elected to fill the House seat vacated by Sparkman, proved an apt disciple, defending TVA and federal defense investment whenever possible.

At the local level, the Huntsville Industrial Expansion Committee (HIEC) assumed the mantle of industrial recruitment, buttressing Huntsville’s economic future while continuing to support the city’s beneficial relationship with the federal government. The HIEC, while relatively new, was a manifestation of a long tradition of community support for industrial growth, stretching back to the Tri-Cities’ fight to utilize the Muscle Shoals plants. By the late 1940s, civic groups had come to play an unbelievably important role in the economic development of the Tennessee Valley. As they pushed the federal government to support industrial growth in their cities and towns, they laid the foundation for a new southern economy.

In Huntsville, the Sunbelt emerged on the old arsenal reservation, as the federal government revitalized the defense facility and in doing so, transformed the relationship between the public and private sectors of the southern economy.

Even as companies like Keller struggled to survive on the former arsenal reservation, the city's business leadership continued their campaign to find occupants for the abandoned facilities. Sparkman, Hill, Jones, the HIEC, and the city's chamber of commerce struggled to advertise the vacancy to private industry even as they met with government officials to tout the site's defense potential. Yet the arsenal's reach extended beyond Huntsville, and as municipal leaders called for assistance, regional planners cooperated with the city to reoccupy the reservation. North Alabama Associates, a private development group formed in cooperation with Decatur's Barrett Shelton and TVA, played an important role in the utilization of the abandoned defense facilities.

The arsenals had been one of TVA's largest and most important customers, both for their considerable power usage and their beneficial effect on domestic demand for electricity – workers at the arsenals made enough to buy the refrigerators, electric stoves, vacuum cleaners, and automatic dryers that TVA promoted as part of its domestic power program. Thus, when Tom Johnson returned to Alabama in 1948 to work for industrial development, he found himself amidst economic crisis. Even as he worked with Shelton and TVA to officially form the NAA, Johnson and City of Huntsville Electric System manager Karl Woltersdorf held a meeting with the officers from Huntsville Arsenal and “various groups” in Washington, D.C., in an attempt to find a permanent, profitable use for the abandoned facility. While pleading with the Army, Johnson worked with Huntsvillians to catalog the available resources at the arsenals. Along with TVA and a number of regional chambers of commerce, Johnson tried to advertise Huntsville as a

potential home for the Army Air Corps's Air Engineering and Development Corporation, which would eventually locate north of the city at Tullahoma, Tennessee. The loss disappointed Johnson and his colleagues – he would later remember that “it was difficult for me to keep my chin up.”<sup>3</sup>

In late 1948, news broke that caused Johnson and his fellow boosters to see the “silver lining” in the economic clouds. Pressure from the HIEC and NAA, from city officials across the Valley, from Representative Jones, and from Senators Hill and Sparkman convinced the Army to reinvest in the Huntsville properties. Colonel Carroll Hudson, the former commander of Huntsville Arsenal, announced that he would return to the facility to command a new Ordnance Department research team studying the use of rockets. The city had “suitable land and facilities for rocket research and development,” and the Army hoped to employ a small cadre of technicians engaged in intensive study of the new field of military science. Hudson was careful to provide a realistic picture of the incoming program. Again and again, the commander cautioned citizens that the new Redstone Arsenal would be very different from its World War II-era precedent. Employment would be gradual: “There is no reason to expect any large expansion at Redstone, comparable to that during the war era.” Most of the potential employees were trained engineers and technicians, highly educated men and women that, as Hudson's words implied, would likely be drawn from other areas.<sup>4</sup>

Yet what the new facility lacked in immediate economic impact, it made up in national attention and relative stability. Hudson met with the Huntsville Kiwanis Club in April, showing a film on the V-2 rocket as an explosive example of the city's future. Within months of the

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<sup>3</sup> Johnson, Untitled Speech, [ca. Jan.-Feb. 1952], courtesy NAIDA.

<sup>4</sup> “Redstone Made Rocket Center for Research,” *Huntsville Times*, 2 December 1948, 1; and “News Just Two Months Old,” *Huntsville Times*, 8 February 1949, 4.

announcement, Hudson and his crew reequipped laboratories, modified existing facilities to meet new demands, and conducted basic engineering work in preparation for full scale utilization of the Redstone Arsenal properties.<sup>5</sup> In October, the government suspended attempts to lease the rest of the old Huntsville Arsenal reservation and began transferring tracts of land to Hudson's unit. The site was gradually absorbed by Hudson and his technicians, and soon, the entire reservation became "Redstone Arsenal." In what Reese Amis, editor of the *Huntsville Times*, called "the most heartening piece of information that has come to this area in some time," Redstone announced it would hire 235 workers in the coming year and relocate another 665 from other facilities across the country.<sup>6</sup> Though gradual, the prospect of any increase in employment provided Huntsvillians with a glimmer of hope. Despite pronouncements otherwise, city leaders tentatively looked to the government to again provide the spark that would light the fire of economic growth in the Valley.

In early September 1949, a group of scientists from the Ordnance Research and Development Division Sub-Office at Fort Bliss near El Paso, Texas, visited Huntsville to discuss "problems connected with the rocket research and development program now underway at the arsenal." Among the visitors were thirteen German scientists, recruited during "Operation PAPERCLIP" to help the United States develop a new generation of rocket-based weapons. The group included Dr. Eberhard Rees, who later recalled his first visit to the city. Rees "had mixed feelings" upon seeing the town. Despite the wartime boom, Huntsville had retained much of its rural/agricultural character, a fact that boded ill for a facility demanding high-tech equipment and sophisticated minds to manufacture rockets. He wondered if the city would be able to provide

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<sup>5</sup> "Redstone Arsenal Being Converted," *Huntsville Times*, 10 April 1949, 1, 4; and Martha Witt Smith, "Full Use of Redstone Arsenal Now in Sight," *Huntsville Times*, 29 May 1949, 1, 2.

<sup>6</sup> "Sale of Arsenal Again Called Off," *Huntsville Times*, 30 October 1949, 1; and "The Greater Redstone Arsenal Installation," *Huntsville Times*, 4 November 1949, 4.

the staff for a complex defense facility: “I ... doubted whether a place like Huntsville with barely an institute for higher education, with only small stores for shopping and with very limited cultural activities and entertainment would attract creative experts and other proper personnel with their families from other parts of the country and the world.” Rees also had personal concerns about the reception he might receive in the South. As he recalled, “I was uncertain whether Huntsville and its population had the progressive spirit and forward looking attitude for the build-up of a community with a social structure so entirely different from the past.”<sup>7</sup>

Rees would soon have a chance to test his fears against reality. The September visit was more than just a conference. In October, Hill, Sparkman, and Jones announced that the entire staff of the Texas facility would relocate to Huntsville. Hudson portrayed the move as one of economy. The laboratories and associated facilities at Fort Bliss were “inadequate,” and the Ordnance Department felt that relocation to the unused buildings at Redstone would cost less than a complete refitting elsewhere (Hudson speculated that the Army had saved nearly \$4.5 million in utilizing the old Huntsville Arsenal grounds). Chief of the Army Rocket Division Holger N. Toftoy also fought for the move. Building off wartime advances in rocketry, the Army had made quick strides in the development of anti-aircraft guided missiles. In order to test the rockets, however, Toftoy needed larger runways than those at Ft. Bliss. Without room to expand in Texas, the Army looked for a site with enough space for experimentation. Toftoy found ample room in Huntsville, and asked to utilize the old arsenal properties.<sup>8</sup> Combined with Toftoy and Hudson’s pleading and the publicity of groups like NAA and the HIEC, the decision was made. Relocated to Huntsville were 500 military personnel and their families, 65 civilian

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<sup>7</sup> Rees’s recollections were included in “Clearly Huntsville,” a pamphlet created in conjunction with the city’s 1976 bicentennial celebration. See “Clearly Huntsville,” [ca. 1976], 11, Hoole.

<sup>8</sup> Erik Bergaust, *Wernher von Braun* (Washington, D.C.: National Space Institute, 1976), 152-3.

employees, and the 100 German scientists from PAPERCLIP, including Dr. Rees and one of the most well known scientists in the country, Dr. Wernher von Braun.

Von Braun became an instant celebrity in the city. Born in Wirtz, Germany, in 1912, he developed an early love of astronomy and joined the Society for Space Travel while still in high school. The young student joined the lab of rocketry expert Hermann Oberth as an assistant and began work on the development of liquid propellants. In 1932, just as the German government evinced a growing interest in the use of rockets, von Braun graduated with a degree in aeronautical engineering and joined the German Ordnance Department, eventually becoming the technical director at the new rocket proving ground at Peenemunde on the Baltic Sea. Von Braun played a key role in developing the V-2 and with the successful launch of the missile, Hitler's Nazi government pumped funds into production. Von Braun's work in creating the weapon made him a controversial figure after the war. The scientist certainly valued the space flight possibilities of the V-2 over its military uses, but in accepting Nazi funds, he implicitly cooperated in the Axis war effort. As he would later tell an interviewer, "We felt no moral scruples about the possible future use of our brainchild ... It was simply a question with us of how the golden cow could be milked most successfully."<sup>9</sup> Throughout the rest of his career, von Braun constantly negotiated the fine line between civilian science and military necessity as rockets became paramount to both fields.

In January 1945, with the war in Europe drawing to a close, the Russian army neared the rocket facility at Peenemunde. Von Braun and his staff faced an important choice: surrender to Stalin's troops or move further south to meet the U.S. The scientists voted overwhelmingly to evacuate. Over 5,000 rocket scientists, associates, and family members collected a large amount

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<sup>9</sup> Qtd. in Michael J. Neufeld, *Von Braun: Dreamer of Space, Engineer of War* (New York: Alfred A Knopf, 2007), 4.

of documents and papers and boarded cars emblazoned “Verhaben zur Besonderen Verwendung” (a mythical “Project for Special Disposition”) to evade the numerous Gestapo checkpoints. Von Braun sent his brother, Magnus, to negotiate with the U.S. 44<sup>th</sup> Infantry at Bleicherode. The Allies gladly accepted the collection of German scientific minds and immediately made plans to transport von Braun and his associates to the United States. Rocket Branch Chief Holger Toftoy took charge of Operation PAPERCLIP, traveling to the captured missile factory at Mittlewerk and shipping out whole and partial V-2s unused in the war effort. Von Braun and 127 of his Peenemunde colleagues were then placed into Ordnance Department custody.<sup>10</sup> The scientists traveled to the Aberdeen Proving Ground in Massachusetts, where they began the laborious process of translating and organizing thousands of captured German documents. The team then transferred to Ft. Bliss where they created apartments and laboratories out of an old army hospital complex. In late 1946, the German scientists began bringing their families to Texas and learning English, preparing to spend the rest of their lives working in the United States.<sup>11</sup>

On April 10, 1950, von Braun, his wife Maria, and their 16 month-old daughter, Iris, left El Paso for Huntsville. The city’s residents were, at first, skeptical of their new neighbors. One young Huntsvillian remembered his first sight of the scientists. Returning from school, he saw a family moving into the house across the street: “The young husband, very blond and handsome in his trenchcoat, and his pretty wife were conversing in a foreign language, possibly German.” When he told his father, the older man announced with a shake of his head, ‘Looks like this neighborhood is going to the dogs.’<sup>12</sup> The new neighbors were the von Brauns. Some

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<sup>10</sup> While every biography of Wernher von Braun carries some version of this story, the best remains von Braun and Frederick I. Ordway, III, *History of Rocketry and Space Travel* (New York: Thomas Y. Crowell Company, 1969), 114-8.

<sup>11</sup> Bergaust, *Wernher von Braun*, 124-9.

<sup>12</sup> Stephens, *Historic Huntsville*, 116-17.

employees had similar concerns about working for “foreign bosses.” In the end, as one popular historian has noted, Huntsville “with the natural aplomb and courtesy of the Deep South, has taken the foreigners into its hearts and, more importantly, into its homes.”<sup>13</sup> The transition was certainly not as easy or smooth as city leaders would have liked, but the economic benefits outweighed the social challenges of rapid economic growth.

Upon arrival, the rocket team immediately set to work. Von Braun hoped to recreate conditions at Peenemunde, housing the research and engineering alongside actual production. This “everything-under-one-roof” approach allowed seamless transition between design, experimentation and testing, and manufacturing. The Army, however, had other plans. The Ordnance Department preferred to keep the ABMA a “research and development organization,” contracting parts supply and production to the private sector.<sup>14</sup> More than any other aspect of the arsenal’s revival, this decision cemented Huntsville’s economic future. Had production been allowed to remain “in-house” at Redstone, the city would undoubtedly have continued in the vein of Huntsville Arsenal. A small cadre of skilled researchers and engineers would design and test rockets, while an army of semi- and unskilled workers would operate the production lines, churning out weapons for the battlefield.

Instead, Redstone Arsenal presented the city with a completely new economic environment. The only unskilled jobs on the facility were in construction, housekeeping, catering, and groundskeeping. Redstone lay at the center of a growing contract network, in which a core workforce of highly educated scientists and engineers directed center activities, farming out the semi-skilled and unskilled production work to industries across the country; it

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<sup>13</sup> Erik Bergaust, *Rocket City, U.S.A.: From Huntsville, Alabama, to the Moon* (New York: The Macmillan Company, 1963), 111.

<sup>14</sup> Neufield, *Von Braun*, 247, 251.

was the very definition of the postwar military-industrial complex: “an interwoven system of production comprising the Pentagon, the armed services, private firms, and political players.”<sup>15</sup> Huntsville saw remarkable economic growth in the 1950s and 1960s, but the jobs and paychecks were completely reliant on the ability of city leaders to diversify the local industrial economy.

In fact, the first private companies to participate in the city’s rocket boom accompanied the relocation of the Ft. Bliss team. Alongside the German scientists came 102 employees of General Electric, which had contracted with von Braun’s team in El Paso.<sup>16</sup> GE quickly found itself amidst a number of additional contractors. Upon learning of Redstone’s new mission, Thiokol moved a division to Huntsville to develop fuel for Army rockets. Within a month, Philadelphia chemicals and plastics manufacturer Rohm and Haas visited Colonel Toftoy to plan for a North Alabama branch.<sup>17</sup> Local companies also benefitted from the arsenal, expanding production on government investment. Reynolds Aluminum received orders for aluminum to be used in missile housings.<sup>18</sup> In return, money that flowed into the outfitting of Redstone benefited the contractors. In June 1951, for example, the government spent \$4 million in constructing new laboratories for Rohm and Haas and Thiokol technicians, not counting the myriad expansions in utilities, roads, and facilities serving employees on the reservation.

Large scale missile production was not the only source of contracts on the arsenal, and in reality, Huntsvillians and other Valley residents benefitted as much from small business agreements as they did from companies like Thiokol. Redstone Arsenal set up a small business

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<sup>15</sup> Markusen et al., *The Rise of the Gunbelt*, 25.

<sup>16</sup> “GE May Have Laboratories at Redstone,” *Huntsville Times*, 13 November 1949, 1; and “GE Move Getting Well Under Way,” *Huntsville Times*, 21 May 1950, 1.

<sup>17</sup> “Redstone Contract Signed by Thiokol,” *Huntsville Times*, 17 April 1949, 1, 2; and “Rohm, Haas Co. to Establish Redstone Labs,” *Huntsville Times*, 19 May 1949, 1.

<sup>18</sup> Neufield, *Von Braun*, 251.

department designed to “assist businessmen here and all over the Valley to get contracts for materials needed in the work at the arsenal.” Within a year of the rocket team’s move, the office supported a number of industries, including a 100-employee cartridge box factory using wood cut and processed in nearby Scottsboro. In the first half of 1951, Redstone let nearly \$700,000 in contracts to North Alabama concerns. Col. Hudson optimistically suggested that the city and region would see a marked increase in contracts to local firms, and by the end of the year, 81% of the arsenal’s contracts had gone to 1,500 small southeastern companies manufacturing everything from rocket parts to floor coverings to lenses used in research equipment.<sup>19</sup>

Valley companies certainly recognized the value in bidding for government work. Walter Eigenbrod, a Huntsville business leader, wrote Bob Jones asking for his support for a loan for his Southern Permanent Awning Company, hoping to enlarge facilities to participate in the defense program. Eigenbrod complained of the difficulty of navigating the Washington bureaucracy, but Jones could offer little beyond contact information. Eigenbrod turned to the business community for help. He wrote Reynolds Metals Company Vice President Marion Caskie in hopes that his aluminum supplier could provide advice on obtaining a government contract. Caskie was much more accommodating than Jones, sending the company a “Government Sales Kit” that introduced its owners to the contract network. Caskie encouraged Eigenbrod to discuss his company’s needs with the Huntsville Chamber of Commerce, and even offered to mention the company to government officials.<sup>20</sup> Decatur Iron and Steel had similar concerns. The company, which produced steel for bridges and buildings, called on Lister Hill for

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<sup>19</sup> “Chance for Small Business,” *Huntsville Times*, 8 July 1951, 4; “Redstone Lets Outside Contracts for \$671,485,” *Huntsville Times*, 29 July 1951, 1; and “Small Firms Get Arsenal Contracts,” *Huntsville Times*, 7 December 1951, 5.

<sup>20</sup> Ivadell Bowser (Jones’s Secretary), to Eigenbrod, 2 October 1950; and Eigenbrod to Jones, 28 September 1950, 26: 507, Bob Jones Papers, UAH; and Maxwell Caskie to Hugh M. Manley, 25 October 1950, 42:759, Bob Jones Papers, UAH.

assistance in avoiding the “natural human predilections” that arose in any contract negotiation. Hill promised to use his influence on the Army, stating that he was “most sympathetic” with the company’s predicament.<sup>21</sup> Both Southern Awning and Decatur Iron and Steel found themselves in the midst of an economic transition. With the expansion at Redstone Arsenal and the implementation of the contract system, small businesses across the Valley had to adapt to a new and potentially lucrative source of funds. Some found assistance in companies like Reynolds, which had long negotiated for competitive bids from government agencies. Others turned to local, state, and federal leaders, hoping their political influence would be a valuable addition to their offer. Thus, as the arsenal revived Huntsville’s economy, the city’s leadership played a crucial role in the distribution of incoming government largess.

The bustle of activity at Redstone Arsenal in the 1950s was a welcome respite from the doldrums of the late 1940s, when most of Huntsville feared a return to the Great Depression era. Industries relocated in Huntsville, local businesses sprang to life, and the city worked furiously to accommodate a future built on government appropriations. Yet as much as Redstone brought hope, many worried that rocket science would not provide the economic foundation the Valley needed. Even as von Braun and his fellow Germans worked to accommodate the needs of the American military, Huntsville’s civic and business leaders looked to create an unassailable sense of security. Should the arsenal fail, or even fail to live up to the expectations of its proponents, they hoped to provide an industrial foundation for economic security. In training skilled workers, reorganizing the city to house the booming population, and diversifying local industries, Huntsville’s leaders avoided some of the dislocation that was a seemingly inevitable

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<sup>21</sup> L.H. Shelley, Decatur Iron and Steel, to Major General Lewis A. Pick, Chief of Engineers, 1 March 1951; Shelley to Hill, 2 March 1951; and Hill to Shelley, 6 March 1951, 180:9, Hill Papers, Hoole.

aspect of rapid economic growth. They also evinced lessons learned from the economic boom and bust that had occurred throughout the Valley's past.

Upon first seeing Huntsville, Dr. Eberhard Rees had worried that the city would be incapable of producing, or even welcoming the scientific talent needed to operate the missile facility. With some production occurring on site and companies like Thiokol and Rohm and Haas in the city, demand for unskilled and semi-skilled workers did increase, but most of the appointments to the facility followed Rees's predictions as a "highly trained" cadre of technicians staffed the arsenal. By 1951, 5,600 worked at Redstone, though the number included workers in manufacturing, field service, procurement, and research and engineering.<sup>22</sup> The growing payroll was certainly helpful for a city struggling to return to wartime prosperity; in 1955, totals at the Arsenal reached \$40 million to 1,500 military personnel and nearly 6,000 civilian employees.<sup>23</sup>

Increasing employment benefited municipal coffers, but the nature of the new jobs did not help those Alabamians who lacked the requisite credentials. In May 1956, the Alabama Hosiery Mill permanently closed with no advance noticed. Overnight, 300 men and women were newly unemployed. Many looked to the expanding arsenal as an option. Charles Black contacted Bob Jones on behalf of a number of out-of-work employees, begging for help finding jobs at Redstone. Jones, Hill, and Sparkman jointly contacted Toftoy, asking him to speak to Black. Later in the month, Black and George D. Hartselle, Jr., calling themselves the "Employment Committee," visited the arsenal, but quickly learned that their congressmen's influence could not create work. Black, Hartselle, and others received applications, but were

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<sup>22</sup> "Scientists Are Key in Rocket Research, 2-Star General Says," *Huntsville Times*, 22 February 1950, 1; "Employment Up as Redstone's Activities Grow," *Huntsville Times*, 7 January 1951, 1, 9; and "Redstone Arsenal Expansion Marks 10<sup>th</sup> Anniversary," *Huntsville Times*, 7 October 1951, 1.

<sup>23</sup> "Redstone's Total Payroll for 1955 Near \$40,000,000," *Huntsville Times*, 1 January 1956, 1.

unqualified for every job listed as available.<sup>24</sup> The situation was no better in 1958. Redstone announced an increase of 1,150 jobs in both government and contractor offices, but all of the openings were “professional type” and unskilled labor would “not be touched at all.”<sup>25</sup> If the city were truly to enjoy the prosperity promised by Redstone, Huntsville’s leadership would need to act decisively to train local workers for skilled positions.

City leaders and arsenal officials hoped that a research university in Huntsville, with programs in math, science, and engineering, would better prepare citizens for full participation in the rocket-based economy. The University of Alabama first authorized an extension of its Tuscaloosa campus in the city in late 1949, offering night classes in a local high school. Redstone Arsenal realized the benefits of local training, and in 1951, the extension center reached an agreement to award graduate credits to arsenal personnel “to contribute to the effectiveness of the rocket and guided missile research and development program at Redstone.”<sup>26</sup> The center quickly outgrew its temporary residence, with over 70 courses and a student population of 1,000, second in size only to the extension center at Birmingham. Beginning in 1957, university trustees began planning for permanent facilities, to be located near the arsenal reservation and the numerous aerospace companies populating its fringes. Soon, arsenal leadership called for expanding the extension center, now being referred to as the University of Alabama at Huntsville (UAH), to a four-year program with opportunities for post-graduate work and the associated research programs. General Bruce Medaris of Redstone’s Army Ballistic Missile Agency made Huntsville and the arsenal’s needs clear, defending a fully developed

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<sup>24</sup> Charles Black, et al. to Jones, 5 May 1956; Jones, Hill, and Sparkman to Toftoy, 9 May 1956; and Toftoy to Hill, 11 May 1956, 188: 201, Hill Papers, Hoole; and Black and Hartselle to Jones, 21 May 1956, 267: “43-H, Industrial Relations,” Sparkman Senate Papers, Hoole.

<sup>25</sup> “1,150 Jobs to Be Added at Redstone,” *Huntsville Times*, 27 March 1958, 1, 2.

<sup>26</sup> “Local Center Is Authorized by University,” *Huntsville Times*, 16 November 1949, 1; and “Graduate Study Institute Established for Arsenal,” *Huntsville Times*, 30 September 1951, 1.

university as essential to the city's growth: "The best prevention for technological unemployment is ... adequate education and training for our future labor force." Arsenal and municipal leaders hoped that UAH would create the scientists and engineers needed to sustain Huntsville's boom. Medaris's remarks encapsulated the problem: "There is not enough fully prepared manpower available in Alabama to support new industry [and Alabama must] provide the foundation through its public schools, universities, and trade schools."<sup>27</sup>

Two local leaders led the fight for UAH: von Braun and the owner of Brown Engineering, Milton K. Cummings. Cummings mobilized the business community, particularly those companies like Brown which were directly funded by government contracts based on the technical specifications of rocket and missile production. Cummings offered the city tracts of land for the university campus and held a number of meetings with his colleagues in the HIEC and chamber of commerce, seeking to create an intellectual climate in the city that would "move all mankind to a higher ledge." In 1961, von Braun personally appeared before the Alabama state legislature, asking for approval of a \$3 million bond issue to help build new labs and facilities at UAH. He promised legislators that the funds would create an "educational climate to attract the right people" and ensure that the government programs and associated private industries stayed in the area. Never one to mince words, von Braun made sure that the state's political leaders realized the essential nature of graduate training in the sciences. The government located the program in the city because "the Army had a big chunk of spare real estate that served the immediate purpose of providing a home ... We've lived in that home for

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<sup>27</sup> "First Step to Center Building," *Huntsville Times*, 7 June 1957, 4; "A Major, Forward Step," *Huntsville Times*, 14 April 1958, 4; "Construction of \$750,000 U of A Branch Okayed Here," *Huntsville Times*, 11 September 1958, 1; and "4-Year College Here Proposed by Medaris," *Huntsville Times*, 23 June 1959, 1, 2.

more than 10 years now, and it's about time we got a schoolhouse and everything that goes with it."<sup>28</sup> That December, state voters ratified the bond issue by a four-to-one margin.

A year later, von Braun continued to call for improvements, telling an audience at the University of Alabama in Tuscaloosa, "One of our greatest needs ... is more trained engineers who can interpret new scientific information and apply it to useful designs, bridging the gap between scientific discoveries and engineering achievements." He called on the government to continue funding local colleges and universities.<sup>29</sup> For the scientist, simply building a university was not enough. Von Braun went on to develop a particularly close relationship with the growing university, allocating nearly \$600,000 to finish construction and reserving some of his research and development for the test stands, labs, and technical equipment located on campus.<sup>30</sup> The federal government realized that just as its local counterpart had promised, an investment in the city's educational establishment brought real returns to the government's numerous rocket and missile programs.

As the revitalized defense economy demanded an immediate improvement in Huntsville's educational climate, the influx of workers at the arsenal, at associated industries, and in the numerous service industries that catered to the new business overwhelmed the city's scanty housing options. In November 1949, only a month after the relocation of the German scientists was announced, HIEC head Fritz Thomas formed the Civic Housing Committee from

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<sup>28</sup> Von Braun to Hill, 19 June 1961, 188: 206, Hill Papers, Hoole; Cummings quoted in "Huntsville, Research Center," *Huntsville Times*, 28 June 1961, 4; and Weldon Payne, "Von Braun Asks Legislature for Rocket Institute Here," *Huntsville Times*, 20 June 1961, 1, 3. See also "Public Meeting Scheduled on Research Institute," *Marshall Star* 1: 50 (13 September 1961), 7, 1: bound, Office of Strategic Communications, Internal Communications Office, Marshall Space Flight Center, Huntsville, Alabama, National Aeronautics and Space Administration Records (MSFC Records), NARASE.

<sup>29</sup> Von Braun, "Educating Engineers in the Space Age," address to the University of Alabama, College of Engineering, 11 October 1962, 4, 7, 3: "Dr. von Braun Speeches, 1962," Office of the Director, Speech Files, 1954-1968, NASA Records, NARASE.

<sup>30</sup> "Alabama Ratifies Space Center Bonds," *Christian Science Monitor*, 6 December 1961, 8; Bob Ward, "NASA Grants \$600,000 to Research Institute," *Huntsville Times*, 5 March 1963, 1.

members of the chamber of commerce. The group immediately began discussions with the Federal Housing Authority to provide homes for incoming scientists and other workers. In a matter of months, the committee members helped to create a realty company, planned for 300 new houses scattered on sites throughout the city, and authored a subscription campaign for the \$50,000 needed to begin construction. The *Huntsville Times* noted the excellent opportunity for investment in rental properties: “These people, who are high salaried, and with fine families, will be a great addition to Huntsville ... The speed with which this money is raised and put on the line, will be a test of how much Huntsville wants to expand.”<sup>31</sup> The newspaper pleaded with its readers to accommodate rapid economic development through investment in the city’s infrastructure.

In the coming years, such appeals would become commonplace as the community strove to match the unbridled expansion of Redstone Arsenal. Just a year later, the *Times* again appealed to the city, Madison County, and surrounding towns and counties to build rental housing for incoming workers. Huntsville was designated a “defense housing area,” with lenient credit terms for new home construction. By 1951, the city had nearly 600 low-income homes available, but a recent survey called for at least 1,000 to meet demand.<sup>32</sup> The situation also concerned arsenal officials. In early 1956, General Medaris foresaw an immediate influx of 4,500 families and promised that in little over a decade, Huntsville would reach a population of 100,000. The housing shortage reached crisis levels. One arsenal official told the chamber of commerce that the “thing of greatest concern to the general is housing for civilians to be

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<sup>31</sup> “Civic Housing Group Formed at Redstone,” *Huntsville Times*, 6 November 1949, 1; “Group Formed to Construct 50 New Homes,” *Huntsville Times*, 22 February 1950, 1; “\$23,500 Raised for Redstone Home Building,” *Huntsville Times*, 28 February 1950, 1; and “A ‘Must’ if Huntsville Is to Expand,” *Huntsville Times*, 28 February 1950, 4.

<sup>32</sup> “Arsenal Housing Appeal Made City, Nearby Town,” *Huntsville Times*, 2 July 1951, 1; and “250 More Low Rent Housing Units Okayed,” *Huntsville Times*, 26 August 1951, 1.

imported into the city.” If Huntsville could not provide homes for technicians on the reservation, then the nation’s defense program could very well be “stymied.”<sup>33</sup>

Housing was not the only problem city leaders faced in preparing for the expanded arsenal. In fact, Huntsville’s entire infrastructure struggled to accommodate the rapidly growing population. In 1950, Huntsville’s city limits encompassed four square miles and 16,500 inhabitants; in 1958, the population reached 50,000 and the city expanded to almost forty square miles.<sup>34</sup> In its earliest efforts to prepare the arsenal for its postwar use, the city had agreed to provide utility service on the site. The city believed itself prepared for growth, but Huntsville’s demand for city services outpaced availability. As the arsenal and its associated industries brought in workers, streets congested with cars, classrooms overflowed, and hospital and recreational facilities proved woefully inadequate.<sup>35</sup> In early 1952, Elizabeth Parks Beamguard pleaded with Sparkman for funds to help the public library. The six-person staff could no longer maintain the “pressure of increased population.” In particular, the voracious reading habits of the German scientists required “considerable time and work in service” (though “it has been a pleasure to work with them”). Beamguard’s library needed at least \$100,000 for books, equipment, and additional space to handle business that had almost tripled since 1941. Her appeal mirrored those of hospital administrators, teachers, and numerous city officials: “It is noted that the entire city is suffering from an overload of necessary services, with an inadequate financial medium of expanding these services.”<sup>36</sup> Some elementary schools threatened to begin

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<sup>33</sup> “Medaris Sees 100,000 City for Huntsville,” *Huntsville Times*, 24 February 1956, 1, 14; and “FHA Will Start Housing Survey Here Tomorrow, Home Shortage Could Stymie Army Mission,” *Huntsville Times*, 5 February 1956, 1.

<sup>34</sup> Huntsville City Council, “Huntsville ... Reports to Its Citizens,” [1958], 7, in Hoole.

<sup>35</sup> See, for instance, “Put First Things First,” *Huntsville Times*, 18 July 1950, 4; “The Growing Traffic Problem,” *Huntsville Times*, 1 June 1951, 4; and “Necessity for Forward Planning,” *Huntsville Times*, 20 June 1951, 4.

operating in shifts, the city's health department warned that the old sewer system was not designed to handle the increased strain, and water works officials promised that a dry summer threatened a water shortage.<sup>37</sup>

The city council sprang into action. Members immediately voted to survey city services to determine needs, which would then be met by \$8.5 million in local bonds and aid from the federal government. Hugh Morrow, Jr., a Birmingham surveyor hired for the job, suggested a program of planned annexation as a way to increase tax revenues and streamline community development.<sup>38</sup> By 1956, the Madison County delegation in Montgomery had drawn up legislation to annex "practically all of the populated areas surrounding Huntsville" without a vote. West Huntsville, Huntsville Park, Lincoln, and all established industries in the area would soon become part of Greater Huntsville. The legislation, crafted in cooperation with the HIEC, allowed the city to provide sewer disposal and utility coverage to areas around the city, opening up new homes for incoming workers and raising increased revenue to help pay for citywide improvements.<sup>39</sup>

Not everyone proved as willing to go along with annexation as the city's leaders had hoped. One employee, B.C. Brockway, carried his protests to the secretary of defense, arguing that he was being "dragged" into the city thanks to the expansion of the arsenal. In return for his cooperation, Brockway demanded that people in the annexed areas be given first shot at jobs opened at the facility. Brockway's bargain was naïve, but his sentiments highlighted a growing

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<sup>36</sup> Beamguard, Director of the Regional Library Service, Huntsville Public Library, to Sparkman, 22 January 1952, 167: "1952-43-Misc. (2)," Sparkman Senate Papers, Hoole.

<sup>37</sup> "Problems of a Growing City," *Huntsville Times*, 3 March 1952, 4.

<sup>38</sup> "\$8,500,000 in Bonds for Expanding City Services Proposed," *Huntsville Times*, 11 April 1952, 1, 9; and "The Morrow Survey of Huntsville," *Huntsville Times*, 18 May 1952, 4.

<sup>39</sup> "Annexation of Suburbs without Vote Agreed," *Huntsville Times*, 4 March 1956, 1, 18.

problem for city leaders.<sup>40</sup> In order to maintain control over the city's expansion, those in charge of Huntsville's infrastructure needed to meet the demands of middle- and upper-class technicians and scientists who worked on the reservation but chose to live in the suburbs. Scrambling to adjust to this new urban/suburban landscape, city leaders largely ignored the needs of those passed over by the defense boom. Leaders assumed that men like Brockway would be swept along in the currents of economic revitalization, little concerned about the life that he would leave behind in the process. The "hardship" that came with annexation (higher property taxes, increased traffic, strange new neighbors) was weighed against the demands of the federal facility and was found wanting.<sup>41</sup>

In the late 1950s and early 1960s, annexation proceeded apace. In 1957, the city government purchased a building next to the old courthouse to house "overflowing" city offices and made plans for a new municipal government complex. The city council voted to add a corridor of Madison County stretching from Huntsville to the Tennessee River to the city limits, providing police protection and municipal services and clearing the way for Redstone to expand a 300-house subdivision. Communities north and west of Huntsville joined the city, though one unnamed area voted seven to three to remain separate, a sign of continued (if ineffectual) resistance.<sup>42</sup> By 1960, the city had built 10,000 new homes, spent nearly \$25 million in electricity, water, sewer, and gas expansions, built new city and county schools, and tripled its

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<sup>40</sup> Brockway to Secretary of Defense, 4 April 1956, 267: "43-M, Miscellaneous," Sparkman Senate Papers, Hoole.

<sup>41</sup> Matthew D. Lassiter notes the importance of metropolitan annexation in *The Silent Majority: Suburban Politics in the Sunbelt South* (Princeton, NJ: Princeton University Press, 2006). He argues that southern city leaders sponsored annexation programs as a means of controlling the sprawling growth of suburbs and maintaining white municipal rule as white voters fled city centers. In Huntsville, annexation allowed city leaders to reserve economic control as well, providing the local government with the ability to spread city services to an expanding population. See Lassiter, *The Silent Majority*, 276-7.

<sup>42</sup> Alex Thomas, "City to Buy More Property for Expansion," *Huntsville Times*, 9 August 1957, 1; Joe Hochstein, "Huntsville Okays Plan to Expand City Limits," *Huntsville Times*, 25 November 1958, 1; and "Vote in Three Areas Favors Joining City," *Huntsville Times*, 1 April 1959, 1, 3.

police force. The construction of a new major artery, Memorial Parkway, promised to ease traffic and provide a new strip of retail spaces for the incoming workers. Huntsville Hospital won a \$790,000 Hill-Burton grant to expand its 172-bed facility to 300 beds.<sup>43</sup> The city had gone a long way towards meeting the needs of its expanding workforce. Huntsville had become “an American conglomerate – cosmopolitan and busy,” gobbling up suburbs and expanding its web of services to reach communities across the central Tennessee Valley.<sup>44</sup> Yet as city leaders pushed to accommodate and encourage growth, they left parts of the city behind.

As Huntsville’s suburbs grew, the city’s old center fell into neglect. Hannes Luehrsen, an architect who had long worked with von Braun and his team, noted the growing problem. In 1957, he released a plan to update the downtown, which had not changed since “horse and buggy days.” A new “City Center” would provide a modern meeting place for the city’s political, economic, and social leadership. Luehrsen noted a problem occurring across the country as the middle and upper classes fled stagnant inner cities for suburbs: “Adding one subdivision to another does not make a city, nor will outskirt shopping centers or development along highways.” The German architect proposed a new civic center, accompanied by a convention hall, new restaurants, theaters, and parks. He noted, “If we plan it right, it has to be more than simply a place for business and traffic, more than just an accumulation of important buildings ... It should be the heart of the City, physically and spiritually.”<sup>45</sup>

Luehrsen’s vision evolved into a city-wide revitalization scheme entitled the “Heart of Huntsville” plan, involving economic diversification, internal improvements, even slum

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<sup>43</sup> “Rockets, Fame, Expansion Marked Area’s Best Decade,” *Huntsville Times*, 1 January 1960, 1; and Jerry Wilkerson, “\$790,000 Grant Won by Huntsville Hospital,” *Huntsville Times*, 29 September 1960, 1.

<sup>44</sup> Bergaust, *Rocket City, U.S.A.*, 59.

<sup>45</sup> Hannes Luehrsen, “Luehrsen Gives City Center Plan,” *Huntsville Times*, 13 January 1957, 1, 2.

clearance. Echoing a constant fear of Huntsville's business community, the "Heart of Huntsville" program resulted in a city more attractive to new industry. As Mayor R.B. Searcy claimed, the city's new "bold architecture" and "spaciousness" would undoubtedly make it the "world's center of space exploration."<sup>46</sup> Luehrsen continued to work for the development, urging city leaders to make careful study of the "Greater Downtown" area in order to create a core of entertainment, shopping, and meeting places, though Searcy and others focused increasingly on slum clearance. Worried that businesses would avoid the city's decaying interior, the mayor valued appearance (and thus, economic recruitment) over practical usage – Luehrsen soon claimed that city leaders ignored his original conceptions for a design of their own making.<sup>47</sup> Once again, worried about future development, city leaders overlooked the needs of many Huntsvillians.

More than any other group, the Huntsville Housing Authority took the lead in initializing the Heart of Huntsville plan. Drawing on federal funds as the "striking edge" of its program, the HHA's revitalization encompassed nearly the entire city limits of Huntsville as they lay in 1950 and resulted in the aptly named Von Braun Civic Center, a new parking system, a city hall, a library, a historically recreated 19<sup>th</sup>-century village, a Hilton hotel, and Big Spring Park, all surrounded by new housing developments. John Sparkman was effervescent concerning the changes made to the city. He ranked slum clearance as one of the two greatest contributions he made to the city's growth (alongside attracting the Chemical Warfare Arsenal in 1941). As he recalled, "We had some of the worst slums to be found anywhere ... This area was so infested with vermin that the Health Department recommended that it not be torn down by hand but be burned down." Sparkman then boasted that he was "given the privilege of setting the first house

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<sup>46</sup> "Space Capital Drive Urged at Huntsville," *Huntsville Times*, 5 May 1959, 1, 2.

<sup>47</sup> "Huntsville Has Neglected to Plan, Luehrsen Says," *Huntsville Times*, 11 December 1959, 15.

on fire ... It was a tremendous fire that cleared the whole area, and it made possible the development of one of the finest and most productive industrial and housing areas in Huntsville.”<sup>48</sup>

The revitalization of downtown Huntsville certainly proved beneficial to the city’s economic development. The civic center and park provided recreational outlets for increasingly affluent engineers, scientists, and technicians while providing a brochure-ready vista to attract interested companies. Yet the residents of those “vermin-ridden” slums were the same low-income, low-skilled workers ignored in the rocket boom. As Huntsville tied its fortunes to defense work, the city’s leadership hoped that rising wages would spread to everyone. Slum clearance served as a telling example of the outlook of the city’s business leaders, who were concerned about larger economic growth and were willing to encourage community development only when it allowed them to attract new industries and preserve government investment.

Throughout the 1950s, Redstone experienced growth that eventually surpassed the levels reached during the war, and the Army’s Redstone, and later Jupiter and Saturn, rocket programs brought valuable government contracts to the area and made Redstone and Huntsville household names. But even as the arsenal grew, city leaders were never sure of economic security. Beginning in 1956, Secretary of Defense Charles Wilson campaigned to remove the Jupiter program from Army supervision and transfer control to the Air Force. The Eisenhower administration, constantly trying to economize, threatened the Army installation’s appropriations. In the late 1950s, excitement over economic growth at the arsenal was tempered by fears that budget cuts or inter-service rivalries would wreak havoc with its payroll and contract network. Huntsville resident Walter Wiesman asked the crucial question: “How much does the present prosperity depend on how much money the government is willing to provide to

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<sup>48</sup> “Clearly Huntsville” [1976], Hoole.

keep many industries going on defense orders?” Bob Jones’s response enunciated their fears, foreseeing “serious readjustments” should a change in federal policy or the international environment decrease funding.<sup>49</sup>

The uncertainty spurred civic boosters to intensify their efforts balance the Redstone payroll with private industry, but a mature industrial recruitment plan did not materialize in the city overnight. In fact, the 1950s proved to be a decade of on-the-job training for the chamber of commerce and the HIEC. During the demobilization of the mid-1940s, the groups had relied largely on publicity to attract business. The HIEC created a detailed pamphlet, in conjunction with the Tennessee Valley Authority, advertising the district for potential investors. Other general publicity, however, the organization did little to actively approach prospective clients. Concerned about the rampant growth of the arsenal and fears of its impermanence, city leaders adopted new strategies. In doing so, their economic development campaign found a maturity that would make their work easier and much more successful.

Even with the formation of the HIEC, the chamber of commerce continued to play an important role in encouraging local growth. As Redstone boomed, the chamber found much of its time devoted to housing problems, annexation, and infrastructure expansion – chamber members were “confessors, guides, and first class assistants” to incoming workers.<sup>50</sup> Yet at the same time, members saw diversification as an important part of the city’s future. The devastating (though temporary) loss of government funds in the late 1940s clearly illustrated the city’s unhealthy reliance on federal funds, and local businessmen worked to bring in industries that would supplement the defense boom. The closure of Dallas Mills, one the city’s last remaining cotton mills, in some ways served as the final nail in the coffin of Huntsville’s old

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<sup>49</sup> Wiesman to Sparkman, 19 July 1957; Jones to Wiesman, 24 July 1957, 119:199, Bob Jones Papers, UAH.

<sup>50</sup> “Harried Chamber Staff Helps Arsenal Families Get Located,” *Huntsville Times*, 20 April 1950, 1, 2.

economy. The auction of the properties “cast a pall of gloom” over the city’s dwindling ability to employ unskilled labor. As the *Huntsville Times* noted, “The closing of Dallas casts (its employees) adrift, at a time of life when employment and earning a livelihood will be no easy matter.”<sup>51</sup> As the city’s leadership encouraged training and expanded city services, they also sought to replace companies like Dallas with new businesses better able to weather the Valley’s transition to a modern economy.

Civic improvement groups had plenty of company in industrial recruitment. In fact, Huntsville actively sought out other communities as successful models. In Mississippi, the Balance Agriculture with Industry Program encouraged legislation giving local governments the authority to issue bonds and build facilities which could then be rented to interested industries. Illustrating that plants could be “bought,” the program promised real returns for municipalities willing to make a similar effort. Lawrenceburg, Tennessee, leaders attracted a large Wamsutta Mills textile firm with a publicly financed bond issue, repaid by rent from the incoming company.<sup>52</sup> The state of Alabama quickly made similar actions legal for its own communities. The 1949 Cater Act and the 1951 Wallace Act (see chapter 5) gave municipalities the right to issue public bonds, which could then be used to purchase industrial sites, build facilities, and organize civic groups to fill the new vacancies with productive industries.

The 1950s also saw cooperation between municipal groups and regional organizations like Tom Johnson’s NAA. Realizing that the reliance on the arsenal affected the entire region, Johnson joined Huntsville’s diversification efforts and employed his region-wide network of

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<sup>51</sup> “Curtain Is Dropped on Dallas Mills,” *Huntsville Times*, 24 July 1949, 4.

<sup>52</sup> “How Mississippi Attracts Industry,” *Huntsville Times*, 19 December 1950, 4; and “One Way to Attract Plants,” *Huntsville Times*, 26 February 1952, 4. Cobb’s *Selling of the South* is the quintessential account of the importance of Mississippi’s Balance Agriculture with Industry program to the modernization of the southern economy, though Lester’s “Balancing Agriculture with Industry” is equally informative.

chambers and interested businessmen to bring new jobs to the entire Valley. Johnson attracted few industries to Huntsville, but his efforts in Decatur, Hartselle, and other Valley towns directed much needed jobs and funds to the region. He worked to utilize the old Dallas Mills facilities, cooperating with the chamber and the HIEC to lease the property to General Shoe and, eventually, to aerospace companies working in conjunction with the arsenal. Yet Johnson's importance to Huntsville's growth went farther than the immediate work of companies brought to the Valley. Johnson's NAA, along with the Wallace and Cater Acts and the successes of civic organizations in other southern states, encouraged Huntsville's leaders to continue expanding local efforts and initiative in a more active, and ultimately more professional industrial recruitment campaign.

As Johnson noted in a speech from early 1952, economic development agencies needed to do more than simply advertise their communities. Proudly pointing to NAA, Johnson enumerated the "foundation stones" of a successful organization. The first step in any campaign was to develop a basic collection of raw data on natural resources, manpower, taxes, education, living conditions, and the myriad other aspects of economic and social life in a given region. Armed with an array of statistics, a successful group worked to cultivate close relations with engineering firms, construction companies, and private consulting groups. Next, it created ties with the local business leadership, recruiting bankers, insurers, large business owners – all of whom had the kind of investment capital needed to purchase sites and build facilities in expectation of enormous returns. Finally, Johnson argued that a group should work closely with educational institutions, particularly the University of Alabama and Alabama Polytechnic Institute (Auburn) (and in Huntsville, UAH), which could marshal research capacities in favor of

new methods of production and management while providing a skilled workforce – attractive propositions for any interested business.<sup>53</sup>

The 1950s began slowly for Huntsville’s industrial recruiters. As the chamber struggled to provide housing, power, water, education, and entertainment for the flood of rocket scientists, the HIEC experienced a number of “near-misses” in its efforts to attract business to the city. Besides the shoe industry that located at the old Dallas Mills, Huntsville remained tied to the arsenal. By 1953, Redstone accounted for nearly 7,000 jobs. The city needed a “good-sized, substantial industry that will give employment to several hundred families.”<sup>54</sup> The group did not lack encouragement for their efforts. In 1954, Governor James “Big Jim” Folsom spoke to a meeting of the HIEC, praising their efforts and giving his own support for the campaign. As Tom Johnson noted, the crowd was glad to know that Folsom’s “heart is wrapped up in the development of new industrial jobs throughout Alabama.”<sup>55</sup> Backed by a number of new statutes, the expansion committee redoubled efforts to bring in firms. By 1960, the HIEC had revolutionized the way Alabama communities attracted industry. In doing so, the group created a new, professional civic development organization better prepared to meet the demands of a Sunbelt economy.

Between 1954 and early 1956, the HIEC had scored two major industrial clients: Mallory-Schwarzkopf, a rare metals company, and American Machine and Foundry (AMF). Mallory-Schwarzkopf’s decision was partially based on Huntsville’s material and labor attractions, but the company also benefited from land that had been specially set aside for them. The month before the move was announced, Huntsville Industrial Sites, Inc., a non-profit

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<sup>53</sup> Johnson, Untitled Speech, [ca. Jan.-Feb. 1952], courtesy NAIDA.

<sup>54</sup> “One Big New Industry for 1953,” *Huntsville Times*, 1 January 1953, 4.

<sup>55</sup> Johnson to Folsom, 8 October 1954, SG13943: 7, Second Folsom Administration Papers, ADAH.

organization created by the HIEC and funded through the sale of 200 shares of public stock, purchased 248 acres of surplus Redstone Arsenal land, marketing part of the parcel directly to Mallory-Schwarzkopf.<sup>56</sup> In June 1956, AMF announced its plans to locate an underground manufacturing plant near the Tennessee River. The HIEC acquired land along the river through the direct purchase of property, organized seismological studies of the surrounding area in preparation for construction, and met with officials when they visited Huntsville.<sup>57</sup> Governor Folsom helped by authorizing a highway directly to the facility – as he told *Huntsville Times* editor Reese Amis, “I appreciate the fact that Madison is one county that likes to push forward as well as I do.”<sup>58</sup>

Less than a month later, HIEC officials obtained state funding for a dock system to be built on TVA land near the incoming AMF plant to provide a shipping terminal that could be used by any Huntsville operation. The *Huntsville Times* hoped that the terminal would “renew the spirit of industrial expansion.”<sup>59</sup> The paper was proved correct in 1959, when, thanks to the HIEC’s persistence, Union Carbide’s Linde Division leased land near the docks for a liquid nitrogen and oxygen plant.<sup>60</sup> Just as they provided housing and services for incoming arsenal employees, community leaders moved beyond simple publicity to cater to the physical needs of potential clients, and was thus able to bring several new industries to Huntsville.

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<sup>56</sup> “Industrial Sites Funds Are Sought,” *Huntsville Times*, 8 January 1956, 1; “New Metals Industry Will Be Located Here Soon,” *Huntsville Times*, 26 January 1956, 1, 24.

<sup>57</sup> “2 Years of Effort Required to ‘Land’ Green Mountain,” *Huntsville Times*, 4 June 1956, 1, 6.

<sup>58</sup> Amis to Folsom, 4 June 1956; and Folsom to Amis, 8 June 1956, SG13958: 11, Second Folsom Administration Papers, ADAH.

<sup>59</sup> “Opportunity for New Effort,” *Huntsville Times*, 15 July 1956, 4.

<sup>60</sup> “Large Liquid Oxygen, Nitrogen Plant to Be Erected in Madison County,” *Huntsville Times*, 18 February 1959, 1, 8.

With the success of Huntsville Industrial Sites, land investment proved to be one of the HIEC's strongest tools in the quest for new industry, and by the late 1950s, their strategy shifted decidedly in that direction. In a report on the city's advantages, the NAA noted the willingness of civic groups to prepare sites for prospective clients, pointing to the spirit of cooperation between the HIEC and the chamber of commerce as an indication that "civic business and governmental leaders are ever mindful of their responsibility to present industry, doing everything possible to bring about their successful and happy operation."<sup>61</sup>

In February 1957, the group purchased the old Lincoln Mills properties, renamed it the "Huntsville Industrial Center," and immediately saw results when Brown Engineering Company, a Huntsville firm expanding on government contracts, leased the facilities. The civic organization even financed a renovation to prepare Brown's offices. In July 1958, Chrysler, which won the contract to construct the Jupiter rocket, decided to locate at the Industrial Center as well.<sup>62</sup> By the 1960s, the Industrial Center was joined by "Industrial Research Park" and the two sites became key selling points for the HIEC, providing office space and industrial facilities in close proximity to Redstone labs. The expansion of the arsenal led the community to prepare for diversified industry, and it convinced civic leaders and the HIEC to move beyond simple publicity to active city planning, and specifically land investments, in order to bring new industries to the area. Despite the successes, though, Huntsville remained unsatisfied. In 1958, the *Huntsville Times* cautioned against inactivity: "Huntsville badly needs new industry if it is to enjoy the soundest economic health. This area has enjoyed unprecedented prosperity in recent years ... However, during the 1930s the community learned first hand the peril of over-

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<sup>61</sup> North Alabama Associates, "A Study of Huntsville, Alabama," [1952-53], 47, in Hoole.

<sup>62</sup> "Industry Outlook Bright for City," Alex Thomas, *Huntsville Times*, 30 April 1958, 1, 8; "Brown Engineering Co. Leases Lincoln Site," *Huntsville Times*, 9 February 1958, 2; and "Chrysler Sets Consolidation at Lincoln Site," *Huntsville Times*, 1 July 1958, 1.

dependence on a single industry.”<sup>63</sup> Without constant effort, the collapse of the defense industry would leave the Huntsville in a position analogous to the Depression-era collapse of the textile industry.

At the end of the impassioned plea for further industrial development, the reporter noted another difficulty. Two groups had largely spearheaded the efforts for Huntsville: the NAA, which had performed some of the initial contacts of industrial clients, and the HIEC, which worked at the community level to address local needs and prepare local sites for occupation. While the two organizations had cooperated in the past, “petty jealousy, selfishness, favoritism and apathy” had begun to threaten regional unity.<sup>64</sup> While unspecified, the growing rift between the HIEC and the NAA almost certainly revolved around jurisdiction. The NAA was a regional organization, funded by a number of Valley municipal electric systems and businessmen. Johnson’s organization sought to place companies in the communities which proved the best fit, and which boasted the best chance for continued development. Huntsville had long been the single largest contributor to the NAA, thanks to its large and profitable electric distribution system. The HIEC, maturing into a determined economic recruiter, focused exclusively on Huntsville and, to a lesser degree, the surrounding county. NAA-recruited industries in Decatur or Scottsboro might employ a few Huntsvillians or bring a minor boost to the county’s treasury, but only Huntsville-based companies could secure the city’s economic future.

Nearly a year after the newspaper first mentioned the growing disagreement, the groups made a relatively clean break. Huntsville and Madison County leaders agreed to limit their work to their own city and county, financed by local businesses and the Huntsville Electric Board, which no longer contributed to the NAA. Huntsville’s developers promised to continue to

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<sup>63</sup> “Teamwork for Industry Missing,” *Huntsville Times*, 30 November 1958, 4.

<sup>64</sup> *Ibid.*

“balance our wheels” and “add weight on the other side of the rim,” but this new, more concentrated effort provided an important opportunity for professionalization. The HIEC decided to hire a “trained and experienced director” as a full-time, paid position to bring in new industry.<sup>65</sup> No longer led by local businessmen forced to balance the needs of the committee with the daily concerns of running a business, the new HIEC focused solely on industrial recruitment with a trained staff and a well-defined area of operations.

In the 1950s, the HIEC brought several important companies to Huntsville, but none matched the size and scope of the revitalized arsenal. Redstone boasted 20,000 jobs and a \$100 million payroll, but as civic leaders constantly reminded residents, Huntsville was far from being economically secure. The jobs at the arsenal were technical, requiring skilled workers and educated scientists and researchers. Separate industries were needed to employ unskilled labor, left behind in the city’s rocket boom. At the same time, as Huntsville gained a reputation for boom town conditions, hundreds of workers came to the area in the hope of gaining employment. In 1958, more than 10% of all jobless people in Huntsville were new to Alabama and the city again struggled to put unskilled laborers to work.<sup>66</sup> Despite its numerous successes, municipal leaders could not simply rest on their laurels. This became even more apparent when the creation of a civilian space agency threatened to undermine Redstone’s amazing growth.

On October 4, 1957, the Soviet Union launched Sputnik, the first manmade object to orbit the Earth. The von Braun team reacted with “frustration and disappointment,” promising that with the proper funding, the Army could have produced an American satellite first. General Medaris told the Senate Preparedness Subcommittee that he and the von Braun team wished that

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<sup>65</sup> “New Industrial Development Formula Deserves Support,” *Huntsville Times*, 4 October 1959, 4.

<sup>66</sup> “Huntsville Prosperity Lures Hundreds Here,” *Huntsville Times*, 2 July 1958, 31.

“government committees would let them alone so they could do their work.”<sup>67</sup> The satellite did not pose a direct threat to the United States, but the symbolic victory in the Cold War “space race” caused an immediate outcry among many in the government, concerned that the Soviet success implied a larger advantage in military technology. President Eisenhower hoped to manage the fallout from Sputnik, stressing the need to develop “peaceful” satellites, but the nature of U.S. space research and development proved a real challenge.

Since World War II, rocketry had been predominately a military science – von Braun and the Army had worked in competition with the Navy and Air Force to obtain funding for future missiles. Even though Eisenhower directed Army scientists and their colleagues in other branches to develop peaceful, “civilian” rockets and satellites, the combination of inter-service rivalry, a lack of government oversight into the development process, and the symbolic nature of the Cold War space race meant that rockets were inseparable from the demand for superior military technology.<sup>68</sup> In 1958, Eisenhower called for legislation that would encourage peaceful space technology. In response, Congress passed the National Aeronautics and Space Act, giving civilian control to the development of space technology, except where weapons were concerned. In effect, the legislation created two parallel rocketry programs, one open to the public and one closed to all but the American military.

Recognizing that the development of space technology had long been the province of the service branches, Eisenhower allowed the new civilian space agency, named the National Aeronautics and Space Administration (NASA), to “borrow” from the scientific talent of the Army, Navy, and Air Force. The transfer included five missions and 2,100 scientists centered in

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<sup>67</sup> Alex Thomas, “Frustration Is Reaction to News Here,” *Huntsville Times*, 6 October 1957, 1; “Committees Hamper Him, Says Medaris,” *Huntsville Times*, 15 December 1957, 1.

<sup>68</sup> Walter A. McDougall’s *The Heavens and the Earth: A Political History of the Space Age* (New York: Basic Books, 1985), remains the seminal work on the development of the American space program.

Huntsville, a decision that “aroused” von Braun and his team. The German told the government that some of his scientists would undoubtedly use the opportunity to move to the private sector (demonstrating the increasing ties between the military and its contractor companies), and he called the decision “less than prudent.” Local leaders agreed. The *Huntsville Times* warned of “serious implications” for the effectiveness of the Army’s ballistic missile program and for the economic health of the city.<sup>69</sup> President of Brown Engineering, Milton Cummings, sent word to Lister Hill of his concern, hoping that NASA would choose the Jet Propulsion Lab in California instead.<sup>70</sup>

In the end, the government recommended the transfer of von Braun and his team from the Army to the civilian NASA, but also allowed the rocket scientists to remain on the Redstone reservation. The decision pleased Huntsvillians, who realized that the location of a major NASA facility in the city would boost federal investment. Yet in “stripping” the German scientists away, Eisenhower effectively ended the service’s military space plans. Instead, the Air Force would largely control weaponized rocketry and satellite development.<sup>71</sup> Medaris was visibly angered by the decision, but he promised that the Army would continue to work on space projects, since their expertise would be used as a “contract service” for NASA. Huntsville’s mayor, though happy that von Braun would continue to be a constituent, expressed the Army’s feelings: “As a reward for [the Army’s] magnificent and indisputable record, the Department of Defense not only umpires the Army out of the ball park but steals all the balls as well.”<sup>72</sup>

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<sup>69</sup> “President Says He Alone Will Decide Whether Army Gives Up Scientists,” *Huntsville Times*, 15 October 1958, 1; “The NASA Proposal,” *Huntsville Times*, 15 October 1958, 4.

<sup>70</sup> Memo, Charles Mitchell to Hill, 27 October 1958, 188: 203, Hill Papers, Hoole.

<sup>71</sup> McDougall, *The Heavens and the Earth*, 198.

<sup>72</sup> “Air Force Wins Control of Space Work; Saturn Will Continue Here,” *Huntsville Times*, 23 September 1959, 2; and “No Change Predicted in ABMA’s Personnel,” *Huntsville Times*, 24 September 1959, 2.

Sparkman asked Eisenhower not to “cannibalize” the Army’s team, and Bob Jones noted the “psychological effect” of the uncertainty surrounding the team’s future. He asked Eisenhower to make a final decision, which would be “a good service to them ... in turn for their continued efficiency and morale.”<sup>73</sup>

In October 1959, two years after Sputnik broke through the atmosphere, Eisenhower made the decision official. He asked Congress to move the team to NASA, consolidating their projects, including the Saturn rocket, under NASA’s civilian oversight. The president announced that the transfer provided a “new opportunity for [von Braun’s team] to contribute their special capabilities directly to the expanding civilian space program.” Keith Glennan, the new head of NASA, praised the decision and the Army’s former scientists, noting their “dedicated teamwork and cordial relationships.”<sup>74</sup> NASA and the Army maintained a close relationship, sharing facilities on the arsenal and cooperating on several existing and new projects. NASA had a separate budget, and a separate “contiguous area” on the reservation, though many of the buildings were split between the Army and civilians until another headquarters was constructed.<sup>75</sup> Work proceeded apace, and researchers on both sides quickly adjusted to the new situation. Huntsville, too, learned to embrace the new government agency making a home on the arsenal, but the implications of the transfer underscored the precarious government funds. In an address to the Huntsville Rotary Club, General Medaris provided the call to arms city leaders needed: “Continue your efforts to broaden the industrial base and thus

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<sup>73</sup> Sparkman to Eisenhower, 9 October 1959, 332: “Fed. Gov. 1-1, RSA,” Sparkman Senate Papers, Hoole; and “Remarks by Representative Robert E. Jones (D Ala.) Concerning Proposed ABMA Transfer,” Undated [ca. 1959], 2-4, 118: 1979, Bob Jones Papers, UAH.

<sup>74</sup> Quoted in “Transfer of ABMA to NASA Will Be Requested by President,” *Huntsville Times*, 21 October 1959, 1, 2.

<sup>75</sup> “Army-NASA Transfer Plan,” 11 December 1959, 1-3, 355: “Mili. 4, Redstone Arsenal, 1960,” Sparkman Senate Papers, Hoole.

provide new opportunities for employment while providing the community with a built-in safeguard against the inevitable displacement that must be expected in a dynamic technology.”<sup>76</sup>

In March 1960, the House of Representatives approved a \$915 million budget for NASA, including \$27 million for construction on the arsenal and an additional \$75 million in new hires, payroll increases, and a heavier project load. As Bob Jones noted, the benefits would undoubtedly spread throughout the community: “These huge expenditures will solidify the position of Huntsville as the rocket capital of the nation and should give all of us a feeling of confidence and security about the future of the area.” NASA Director Glennan agreed, promising “steady, sound growth.”<sup>77</sup> Soon, NASA found a new home on the arsenal reservation at the George C. Marshall Space Flight Center, though much of their work continued in the same general area where they had labored for a decade. Marshall officials transferred 500 technicians from other government facilities and hired 1,200 for administrative and support work.<sup>78</sup> Despite the new facilities, the rapid staff increase caused immediate problems for Redstone, and both Sparkman and Hill received numerous requests for funding to expand existing offices and build new ones. The congressmen supported the \$4.5 million Independent Offices Appropriation Bill, hoping to move government scientists from rented space in the old Lincoln Mills and temporary offices in renovated army barracks and huts.<sup>79</sup>

In September, Eisenhower publicly dedicated the Marshall Center with words of encouragement for the assembled public. He proclaimed that the Army’s accomplishments were

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<sup>76</sup> “Gen. Medaris Makes Report to Huntsville,” *Huntsville Times*, 9 December 1959, 16, 17.

<sup>77</sup> “Arsenal Gets Bulk of NASA Budget,” *Huntsville Times*, 10 March 1960, 1; and Jerry Wilkerson, “Stability to Rule NASA Plan Here,” *Huntsville Times*, 27 March 1960, A1, A6.

<sup>78</sup> “NASA’s Redstone Unit Named for Marshall,” *Huntsville Times*, 15 March 1960, 1; and Weldon Payne, “NASA Transfer Progresses Here,” *Huntsville Times*, 5 May 1960, 1, 2.

<sup>79</sup> Lewis Odom to Sparkman, 12 May 1960, 355: “4, Redstone Arsenal, 1960,” Sparkman Senate Papers, Hoole; and Wernher von Braun, transcript of telephone call to Lister Hill, 29 June 1960, 299: 1, Hill Papers, Hoole.

“the product of unrestrained human talents and energy and restless probing for the betterment of humanity,” and looked forward to successful continuation of that work: “We are propelled in these efforts by ingenuity and industry – by courage to overcome failure and disappointment – by free range of imagination – by insistence on excellence with none of these imposed by fiat. None of it ordered by a domineering bureaucracy.”<sup>80</sup> The president’s speech served two purposes. First, in praising the accomplishments of the von Braun team’s Army career, the president hoped to salve the wounds caused by the transfer to NASA. Yet Eisenhower also hoped to point to NASA’s future triumphs. Success in the civilian agency came without the “domineering bureaucracy” of an overarching government or military oversight committee. NASA would be free to employ the “courage,” “talents,” and “imagination” of its own researchers, but also of private industry.

Alabama’s business leaders had been introduced to the government contract system long before Marshall’s entrance. Redstone, while producing some rockets in-house, had also relied on outside companies (in Alabama and across the country) to build components, engines, and electronics, as well as produce the liquid oxygen that generated the thrust for flight. The Army’s 1500-mile Jupiter rocket exemplified the cooperation that marked government-industry relations. As one reporter for the *Washington Post* noted, the missile had been developed and tested by government scientists and engineers, and the team at Redstone provided almost all of the engineering work, including the construction of prototypes used during the experimental phase. Private industry carried out the plans and specifications developed by Redstone. Proponents of this system praised the Army for its ability to check private costs and profits – some even made the auspicious comparison between Redstone’s oversight and TVA’s “yardstick.”<sup>81</sup>

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<sup>80</sup> Qtd. in “Here Is the Text of Ike’s Talk,” *Huntsville Times*, 4 September 1960, 2.

In fact, the two were remarkably similar in principle. The Authority's "yardstick" power rates were designed to provide instruction for distributors of electricity produced by the Authority while undermining the influence of privately owned utilities. Lilienthal proved much less willing to police what companies did with the power purchased as long as businesses relocated to the Valley. Likewise, Redstone officials hoped that they could set guidelines for the contract corporations that drew up plans and specifications. A rocket designed, tested, and prototyped at Redstone would, in theory, prove much cheaper to mass produce than one designed completely in-house at Chrysler or Douglas, where the companies' staff could charge exorbitant rates and wages on each stage of production. The Air Force, which chose instead to contract out design to private companies, argued the reverse, and in doing so, echoed many of the claims once put forward by Alabama Power. One retired Air Force general who presided over a private organization of aircraft manufacturers noted that by allowing private companies to oversee complete development of each rocket, his former service cut out the cost of middlemen. He told a reporter that "the Government arsenal has about outlived its usefulness."<sup>82</sup>

Many in the government backed such claims. In 1959, General Medaris faced a congressional subcommittee investigating the contract system as part of the larger inter-service rivalry for missile work that resulted in the creation of NASA. Congresswoman Martha Wright Griffiths of Michigan asked Medaris why work on the Jupiter had been split between Chrysler, headquartered in her home state, and Hayes, an aircraft company with offices in Birmingham, Alabama. The congresswoman cited Chrysler's diligence in performing up to Redstone's standards, even claiming that the success of the Jupiter program rested largely on Chrysler's involvement. The unspoken implication was that if the Army, like the Air Force, had given the

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<sup>81</sup> John G. Norris, "New Weapons Question . . .," *Washington Post, Times Herald*, 5 July 1957, A15.

<sup>82</sup> Gen. Orval R. Cook, President of Aircraft Industries Association, quoted in *ibid.*

entire contract to the Michigan manufacturer, then Medaris might have avoided a confusing and expensive web of contractors and subcontractors. Medaris fired back, defending the Army's system. He cited his arsenal's numerous successes and told Griffiths that by keeping part of the process in-house, he could cut corners and act as needed to ensure production. He informed investigators that Hayes had been chosen to complete some emergency work since it was close enough to Huntsville for a quick turnaround on the project. Hayes officials backed Medaris's claims, explaining that the Redstone team "did [itself] a favor having Hayes Aircraft Corporation handle certain of their emergency work here in Alabama where changes and coordination could be carried out at the least possible expense and delay."<sup>83</sup> Keeping the business in-state, even in-region, was an unmentioned bonus.

Hayes was not the only Alabama company that benefited from the arsenal's contract system, and many state industrialists looked to the government facility as a needed source of both projects and jobs. By 1958, a quarter of the arsenal's budget was dedicated to small businesses, with an additional 20% of money going to larger prime contractors being spent on smaller subcontracts. Over 4,000 private employees worked alongside the Army's scientists; the largest contractor on base was Thiokol, followed by Chrysler and Rohm and Haas, all of which had offices in the city.<sup>84</sup> The Army's system served Huntsville well, providing a relatively steady stream of high-paying technicians working in von Braun's labs and a number of workers in smaller factories scattered across the Valley, making components used on the German's rockets.

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<sup>83</sup> Sparkman to Medaris, 5 March 1959; and Hayes Aircraft Workers to Sparkman, 5 March 1959, 332: "Fed. Gov. 1-1, Redstone," Sparkman Senate Papers, Hoole.

<sup>84</sup> "Redstone Big Shot of Health for Business across Nation," *Huntsville Times*, 4 May 1958, 11; and Bob Ward, "4,200 from Industry Aid Redstone Projects," *Huntsville Times*, 19 April 1959, 22.

By replacing the Army's government-heavy contract oversight system with a research, development, and production program reliant on private industry, the government culminated a long process of privatized industrial development in the Tennessee Valley. By 1960, the government was no longer willing to manage the industrial growth of the region. Instead, through NASA, Washington provided a stream of appropriations that filtered through Marshall to a number of private aerospace concerns, which then managed their own workers and subcontractors. Thus, even as the Tennessee Valley Authority increasingly relied on the work of civic and regional development organizations to carry out its plans for economic growth, the other major source of government development funds, the rocket and space program at Redstone and Marshall, left the development of new industry to its major contractors and the municipal groups concerned with the area's diversification. Marshall's contract network certainly added to North Alabama's city and county coffers, but the benefits never completely trickled down to the residents unable to find work with the space program. Associated concerns certainly saw increased business, employing many in the retail and service industries, but in the end, the immense growth of Huntsville's space budgets never translated to similar growth at the lowest levels.

In September 1960, von Braun invited 380 representatives of major industries to an orientation conference, hoping to "enable industry to understand the support Marshall Space Flight Center will require in its present and future missions and objectives." Of its \$360 million budget, Marshall planned to dedicate a "choice cut" to the "maximum capabilities of private industry."<sup>85</sup> Von Braun and his team unveiled blueprints for the upcoming line of Saturn space vehicles, took industrialists on tours of the new labs and testing grounds, and heard speeches

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<sup>85</sup> D.M. Morris for von Braun, to Sparkman, 30 August 1960, 355: "Mili. 4, Redstone Arsenal, 1960," Sparkman Senate Papers, Hoole; and "Industry's Role at MSFC Told," *Huntsville Times*, 27 September 1960, 1.

from the directors of each department.<sup>86</sup> NASA Director Glennan was a firm believer in the benefits accrued from a close relationship with private industry, but Marshall's director was a reluctant contract manager.<sup>87</sup> Von Braun chafed at the government's removal of a large part of his team's development work. Even worse, his earlier fears were proven true when a number of his original German colleagues used the shift from the Army to NASA to leave for more lucrative positions at private companies. The scientists cited "concern over their ability to provide a college education for their children," and the defections hinted at the larger problem: the inability of the government to compete with a private pay scale. Others formed their own companies, including a small group of technicians and engineers who left Marshall to found Space Craft Incorporated (SCI), developing space satellite and missile equipment for their former colleagues.<sup>88</sup> In both cases, the former government workers continued to benefit from the arsenal's growth, and in return, provided the inside knowledge invaluable to companies looking to obtain missile contracts.

Of the myriad companies that contracted with Marshall for work, many were large national companies with the capacity to manufacture the massive rocket bodies and intricate engines required for space flight. News releases consistently listed work going to Chrysler and Seattle-based Boeing. In 1962, for instance, California's Lockheed Missile and Space Company was selected by NASA for the development and production of the Reactor in Flight Test vehicle, a contract worth \$180 million. In September alone, Boeing was awarded a \$7.3 million contract

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<sup>86</sup> "400 Attending Industry Conference at Marshall," *Marshall Star* 1:1 (28 September 1960), 1, 2; and "Tour of MSFC Facilities Ends Industry Meeting," *Marshall Star* 1:2 (5 October 1960), 3, box 1, Office of Strategic Communications, Internal Communications Office, "Marshall Star," MSFC Papers, NARASE.

<sup>87</sup> McDougall notes Glennan's reliance on private industry. See McDougall, *The Heavens and the Earth*, 196.

<sup>88</sup> Jules Witcover, "Redstone's Key Losses Explained," *Huntsville Times*, 17 April 1960, A1, A3; and "Space Agency Group Forms Private Firm," *Huntsville Times*, 18 June 1961, B10. See also Michael J. Neufield, *Von Braun: Dreamer of Space, Engineer of War* (New York: Alfred A. Knopf, 2007), 339.

for a comprehensive rocket design, test, and launch program – that same month, Alabama companies won \$7.7 million combined.<sup>89</sup> Not all money awarded to national companies fled Huntsville. Boeing and Chrysler both maintained offices in the city, solving problems that arose and providing a quick response on new contracts. In September 1962, Lockheed purchased an 80-acre tract in the city’s industrial park to coordinate contracts with Marshall. The recruitment work was largely accomplished by the HIEC, and Lockheed specifically praised the proximity of UAH as a source of future training. The *Huntsville Times* called the decision “one of great importance” and hoped it would prove an “ice-breaker” for other space and missile agencies. Lear Siegler, a California-based electronics firm, chose Huntsville as the site of a plant just days after Lockheed. The company employed 200, but nearly half came from California.<sup>90</sup>

These “victories” for the city’s economy were mixed blessings. The influx of highly paid, highly skilled technicians and engineers certainly boosted tax revenue and provided a new repository of business for Huntsville’s retailers. However, the specialized knowledge needed in the design and construction of space vehicles often required years of specialized education, something few native Huntsvillians possessed. Von Braun’s work for UAH proved an important addition to the city, but the fact that Lear Siegler needed to bring almost half of its office from the West Coast points to the real challenge city leaders faced. Groups like the HIEC continued their work to add to the city’s business population, but they also looked to bring in more and more aerospace companies to fill Marshall’s (and Redstone’s) contract demands. Hoping that

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<sup>89</sup> “September Awards Total \$45 Million,” *Marshall Star* 3:5 (24 October 1962), 1; and “\$, Manpower, Construction Show Growth,” *Marshall Star* 3:14 (2 January 1963), 1, 6, box 1, Office of Strategic Communications, Internal Communications Office, “Marshall Star,” MSFC Papers, NARASE.

<sup>90</sup> “Lockheed Buys Tract for New Plant Here,” *Huntsville Times*, 21 September 1962, 1; “Lockheed and Our Future,” *Huntsville Times*, 23 September 1962, 4; and Bob Ward, “West Coast Firm to Employ 200 in Plant Here,” *Huntsville Times*, 25 September 1962, 1.

rising economic fortunes would lift all Huntsvillians, the city's leadership failed to truly address the needs of unskilled and unemployed residents.

Leaders in Washington and local industrialists tried to ensure that a number of businesses benefitted from defense contracts. In 1961, President John F. Kennedy directed the Defense Department to channel contracts to areas with "chronic heavy labor surpluses," Major General August Schomburg, the commander of the missile command centered at Redstone, immediately contacted his local contractors, including Lew Jeffers at Hayes Aircraft, and asked for assistance in awarding subcontracts to the smaller businesses in the area. Jeffers happily concurred, welcoming the increased business.<sup>91</sup> He also realized the need to keep contracts flowing to Alabama companies. The local offices of Boeing and Lockheed, completely dependent on a relationship with NASA, contributed to the city's treasury, but did little to buttress the overall economic health of the Valley. Cognizant of the need to support local growth, the space center specifically directed contracts to companies like Hayes Aircraft, which would keep the funds completely within the boundaries of the region. In January 1962, for instance, Marshall let \$15 million (of a total \$82 million) to Alabama companies, including \$100,000 in Decatur and \$6 million in Huntsville (\$4.8 million alone to local engineering firm, Brown). In April 1963, four local firms won a total of nine contracts, garnering \$27.6 million in government funds.<sup>92</sup>

Von Braun championed local businesses and worked to encourage the city's leadership to create a foundation for the development of local companies which could successfully compete for space contracts. In a speech to the annual chamber of commerce banquet, Marshall's director

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<sup>91</sup> Schomburg to Jeffers, 3 May 1961; and Jeffers to Schomburg, 10 May 1961, 64A577-13: "Mili. 12, Hayes Aircraft Co.," Sparkman Senate Papers, Hoole.

<sup>92</sup> "Marshall Contracts Total \$82 Million during January," *Marshall Star* 2:22 (28 February 1962), 1, 7; and "Nine MSFC Contracts Net Local Firms \$27,588,482," *Marshall Star* 3:35 (29 May 1963), 6, Box 1, Office of Strategic Communications, Internal Communications Office, "Marshall Star," MSFC Papers, NARASE.

encouraged his audience to make the needed “long-range contributions” to the city’s growth. He praised the city’s work to improve the racial climate (see below) and the formation of a local Better Business Bureau, but called for more work to improve Huntsville’s hospital and recreation facilities, better traffic management, a city beautification program, and a new focus on education. He asked the city’s leading citizens, “Are we doing enough for those less fortunate families who are bypassed by the big space and missile boom ... Are we doing everything possible to attract more diversified industry to the community?”<sup>93</sup>

He made similar suggestions in a 1965 speech to the Alabama Chamber of Commerce Board, in which he explicitly acknowledged the importance of his center’s work in Huntsville. With 21,800 employees in the city, split between 7,000 civil service and 14,800 contract workers, Marshall’s presence “has impacted heavily on Alabama’s prosperity.” Von Braun estimated that he paid \$215 million to his employees, who then spent \$130 million in retail purchases and \$6.5 million in income tax payments. His conclusion was both an appreciation of Alabama’s encouragement of local growth and a warning to those who had come to rely heavily on federal funds: “I think we should admit to the fact that much of our prosperity is due to federal programs being carried out in the state ... one cannot fail to see the tremendous impact these programs are having on the state’s economy.”<sup>94</sup> The ability of local firms to compete for NASA contracts was crucial to the Valley’s continued prosperity.

Brown Engineering, perhaps more than any other local business, exemplified the intricate relationship city leaders enjoyed with the government and their fellow business owners, as well as the potential for community growth on government contracts. In 1953, a group of

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<sup>93</sup> Von Braun, “Huntsville in the Space Age,” 8 December 1964, 29-35, 1: “Dr. von Braun’s Speeches 1964,” Office of the Director, Speech Files, 1954-1964, Speeches Given by Wernher von Braun, MSFC Papers, NARASE.

<sup>94</sup> Von Braun, “Alabama’s Future with the Space Program,” June 1965, 1: “Dr. von Braun’s Speeches 1965,” *ibid.*

Huntsvillians brought Marietta Tool and Engineering Company to the city to work with Redstone Arsenal. After receiving \$40,000 in working capital from local investors, the company won its first contract, a fin-and-rudder design on the Army's Redstone missile. The company began to expand on government contracts, eventually changing its name to Brown Engineering after an Indiana industrialist bought the controlling interest. In the late 1950s, Milton K. Cummings took over as president and personally led the firm into the space age. Cummings began his career as a clerk for a cotton merchant, but he worked his way up to become a financier. By 1959, Cummings and Brown were prepared to help Redstone and Marshall with locally based missile engineering, eventually becoming the center's largest engineering support contractor.<sup>95</sup>

With a talented firm in such close proximity, von Braun quickly became dependent on Brown's services. In 1965, for instance, Brown won a \$12.4 million contract from Marshall for support labs to research and develop propulsion systems and vehicle designs. The company employed 920 technicians under the contract, outnumbering many of the larger companies' local offices in the city. Cummings consistently adapted to meet Marshall's needs, underscoring his company's reliance on the government facility. When von Braun's team planned to activate the Michoud testing facility outside New Orleans, Brown immediately prepared to set up offices in Louisiana.<sup>96</sup> Brown also offered to lease testing facilities to SCI, hoping to be included in

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<sup>95</sup> Elise Hopkins Stephens, *Historic Huntsville: A City of New Beginnings* (Woodland Hills, CA: Windsor Publications, 1984), 184-5. In 1967, Brown merged with California-based Teledyne, Inc., and began expanding into larger defense projects for the United States government as well as foreign defense agencies.

<sup>96</sup> "Nine Firms Win Support Contracts; \$58.5 Million," *Marshall Star* 5:23 (10 March 1965), 1, box 2, Office of Strategic Communications, Internal Communications Office, "Marshall Star," MSFC Papers, NARASE; and Cummings to J.C. McCall, Assistant to the Director, 29 September 1961, 1: "6.Brown Engineering Company, 1961-66," Office of the Director, 1958-1968, Upper Management Files, #17 Series, Contract Corp. Records, MSFC Papers, NARASE.

valuable subcontracts from its fellow Huntsville firm.<sup>97</sup> Cummings led his company to aggressively pursue government funds and, in return, reaped millions of dollars in engineering contracts.

Brown combined profit-seeking with a real desire to see Huntsville grow, and Cummings's community development work illustrates the interconnected nature of private business, federal funds, and local progress. Cummings became an active partner of the HIEC, personally financing the creation of both the Huntsville Industrial Center and the eponymous Cummings Research Park. Seeking to provide a space for the incoming aerospace offices, Cummings purchased 150 acres on land adjoining both the arsenal reservation and the growing campus at UAH. Brown Engineering relocated to one tract, and Cummings sold the remaining plots to other firms at cost. Research Park quickly became a major selling point for the HIEC's continuing diversification, and soon after, an important source of funding for continued scientific training. Huntsville Industrial Sites, the non-profit organization set up to market the industrial park renamed itself the University of Alabama at Huntsville Foundation and added more acreage. As companies such as IBM and Boeing bought space, they contributed to the programs at UAH that trained their workers to compete for new jobs.<sup>98</sup> In fact, as chairman of the Research Institute Committee, Cummings helped von Braun organize the campaign that brought state support to the remarkable growth of UAH, and he consistently encouraged math and science in local schools. In 1961, Cummings proposed a "counsel and guidance seminar and tour" in conjunction with Marshall and area universities which introduced local high school and college

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<sup>97</sup> Vice President William A. Giardini to Space Craft, Inc. (SCI), 31 May 1961, 1: "6. Brown Engineering Company, 1961-66," Office of the Director, 1958-1968, Upper Management Files, #17 Series, Contract Corp. Records, MSFC Papers, NARASE.

<sup>98</sup> Bob Ward, "Space Employment Spiraling," *Huntsville Times*, 2 January 1966, 1, 2. For a good general discussion of the history of Cummings Research Park, see Melinda Gorham Joiner and Peter Coburn, *Huntsville: Where Technology Meets Tradition* (Huntsville: Community Communications, 1993).

graduates to missile and space work. Brown actively sought cooperation from other local firms, hoping to create a community-wide foundation for the employment of Huntsvillians and Alabamians in highly skilled positions.<sup>99</sup>

Brown was one of the most visible of the local companies which benefited from Marshall's largess, but it was not alone in growing alongside the space center. Federal funds flowed into Huntsville during the late 1950s and early 1960s, and as Marshall's contracts spread throughout the region and nation, business in the Valley boomed. Chrysler, Boeing, Brown, SCI, and others hired new scientists and engineers, who then spent money in the city's restaurants, shopping malls, and paid taxes to the cities and counties of the Tennessee Valley. Yet as von Braun's active encouragement of community improvement shows, the laissez-faire economics of the government contract system did nothing to address the social inequalities of the town. As increased national attention fell on the "Rocket City," its racial and gender norms faced serious challenges brought on by federal development.

Throughout its wartime boom and postwar bust, Redstone Arsenal provided an opportunity for employment for the Valley's African American population, but economic gains did not result in political or social equality. Despite the presence of a federal facility, the city carefully maintained a segregated environment. The revitalization of Redstone again drew federal attention to Huntsville, and again, city and state leaders hoped to forestall change, even as Washington slowly moved to address civil rights. Senator John Sparkman, answering inquiries from around the country on his position on the Supreme Court's *Brown vs. Board of Education* decision, perhaps best characterized the stance of fellow white southern New Deal liberals.

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<sup>99</sup> Cummings to Assistant to the Director J.C. McCall, 26 April 1961, 1: "6. Brown Engineering Company, 1961-66," Office of the Director, 1958-1968, Upper Management Files, #17 Series, Contract Corp. Records, MSFC Papers, NARASE.

Sparkman gladly took credit for his role in drafting the “Southern Manifesto,” a document signed by a number of southern congressmen and governors protesting school desegregation, and stressed, “I believe that any effort to force changes against the will of the people may well set back the progress that has been made over the years.”<sup>100</sup> Sparkman was content to reinforce his state’s segregation laws while encouraging black Alabamians to use economic opportunity to make social gains.

The government, however, was unwilling to wait. The same military funding that had driven Huntsville’s remarkable growth proved to be an especially potent weapon. In late 1958, syndicated columnist Drew Pearson warned members of the HIEC that the United States might curtail military spending in the South because of its “race problems.”<sup>101</sup> Pearson’s comments highlighted a growing concern. The government facilities relied heavily on well educated scientists and technicians recruited from northern and western universities. As Alabama became synonymous with violent reactionism, Redstone and Marshall found recruitment increasingly difficult. In 1964, an unnamed NASA official released a statement arguing that Huntsville would lose its space activity unless “its people show a greater appreciation of this economic plum and abandon their hate the federal government attitude.” Sparkman received an influx of letters begging him to “hold onto what you have worked so hard to get in.” The *New York Times* reported a government discussion on a proposed transfer of Marshall’s staff to NASA’s New Orleans facility due to Alabama’s refusal to integrate. The paper attributed the proposed relocation to Alabama’s “social conditions” and called it a “direct slap at Gov. George C.

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<sup>100</sup> Sparkman to Joseph Sabias, Bay City (Michigan), 2 July 1956, 277: “54”; and Sparkman to Sampson R. Bilyen, Taylorville (Illinois), 24 September 1956, 277: “54-Segregation from June,” Sparkman Senate Papers, Hoole.

<sup>101</sup> Qtd. in “U.S. May Penalize South for Stand on Race Issue,” *Huntsville Times*, 10 December 1958, 1.

Wallace ... and the racial policies of his state.”<sup>102</sup> Sparkman immediately contacted NASA and President Lyndon Johnson, who promised that the announcement was a rumor and that Marshall would remain untouched.<sup>103</sup>

Even if the government refused to act, Alabama’s image was having an effect on Marshall’s programs. Renewing his role as a proud proponent of the city of Huntsville, Wernher von Braun begged city and state leaders to work to improve their state’s race relations. In a June 1965 speech to the Alabama Chamber of Commerce, he cited a letter published in the *Congressional Record* in which three University of Rochester (New York) students stated that they would refuse to take a job in Alabama “due to the unfavorable posture of this state in racial matters.” As von Braun added, a number of his recruiters had received similar “testimonials-in-reverse.” He asked the assembled businessmen and businesswomen to take a “positive and constructive” approach to solving the state’s problems, and counseled that “we should work hard to shed the labels of obstructionism and defiance that have been applied to us.” Von Braun praised the “admirable” and “courageous” work of the statewide Committee of One Hundred, a group of business leaders working to “accommodate the forces of change” in communities looking to attract industry.<sup>104</sup> Alabama needed to take proactive steps in repairing its reputation if its businesses, public and private, were to recruit top-level researchers and technicians. In Huntsville, school desegregation provided the perfect opportunity to test the impact of civil rights agitation on the business climate.

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<sup>102</sup> William H. Murray to Sparkman, 23 October 1964; and H.O. Ragland to Sparkman, 24 October 1964, 66A677-7: “Fed. Gov’t, NASA,” Sparkman Senate Papers, Hoole; and John W. Finney, “NASA May Leave Its Alabama Base,” *New York Times*, 24 October 1964, 12.

<sup>103</sup> Sparkman to Representative Frank Boykin, 29 October 1964, 66A677-7: “Fed. Gov’t, NASA,” Sparkman Senate Papers, Hoole.

<sup>104</sup> Von Braun, “Alabama’s Future with the Space Program,” June 1965, 1: “Dr. von Braun Speeches 1965,” MSFC Papers, NARASE. Von Braun made a similar plea to Huntsville business leaders. See von Braun, “Huntsville in the Space Age,” 8 December 1964, 1: “Dr. von Braun’s Speeches 1964,” *ibid*.

In March 1959, Washington, D.C., NAACP Director Clarence Mitchell accused military authorities of cooperating with segregationists on two defense facilities: Little Rock Air Force Base in Arkansas and Redstone Arsenal. Base officials in Huntsville had sold 21 acres of land to the city for a segregated elementary school. Mitchell argued that instead of giving the city land, the Army should build an integrated school on the property, and he further accused Redstone officials of cooperating with a city in active defiance of the *Brown* ruling.<sup>105</sup> In response, the Department of Defense moved to integrate arsenal schools, an act that Alabama Governor John Patterson called a declaration of “all-out-war.” Madison Pike School was one of only two segregated schools drawing 100% of its students from military districts (along with a school in Abilene, Texas), and it had escaped federal attention since it was operated by the local school system. Patterson immediately prepared to fight the government, claiming that federal authorities had no jurisdiction over local schools and promising to enact a state law that allowed local school boards to shut down schools under a “threat of violence.”<sup>106</sup> The *Huntsville Times* preached caution, noting the “sound reasoning [of] leaders of both races” and instructing locals to avoid “excitement or rash action” in favor of the city’s legal defenses.<sup>107</sup>

Mitchell pressed his case as the Department of Defense investigated. In 1962, still awaiting government action, he charged government leaders with “pussyfooting.” The arsenal’s African American staff was also growing impatient. A sergeant stationed at Redstone petitioned the Huntsville School Board to allow his daughter to attend a white school located closer to the

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<sup>105</sup> “Segregation Aid Charged to Military,” *Washington Post, Times Herald*, 4 March 1959, B3.

<sup>106</sup> “City Officials Here Say Plan to Integrate Was Surprise,” *Huntsville Times*, 10 November 1959, 1, 2. See also Warren Trest, *Nobody but the People: The Life and Times of Alabama’s Youngest Governor* (Montgomery, AL: New South Books, 2008), 304.

<sup>107</sup> “A Time for Caution and Wisdom,” *Huntsville Times*, 11 November 1959, 4.

sergeant's home than the nearest black school.<sup>108</sup> In January 1963, the U.S. government asked a federal court in Huntsville to issue a court order forcing the city and county school systems to end discriminatory education practices affecting black military and civilian families working for the Army at Redstone. The government specifically noted \$4.4 million in investments in Huntsville schools and threatened the removal of federal funds if the schools continued to obstruct integration. Federal officials argued that when the school board accepted the money, it had agreed that the facilities "will be available to the children for whose education contributions are provided ... on the same terms."<sup>109</sup> The government demanded that the city schools fulfill that promise.

Similar problems affected UAH. Even as the government forced the city and county to integrate, the University of Alabama cancelled a course at the Huntsville extension center when Joan Cashin, the African American wife of a local dentist, applied for admission. UAH officials claimed that they were unable to procure a speaker for the class, but the underlying motives were clear to Cashin. Asked about the incident, she stated, "My main regret is that Alabama, through the university, has in effect put a brake on better race relations which have been developing here." Ironically, Cashin was able to apply largely due to the center's desire to increase participation in its programs on the arsenal. She attempted to enroll in a class with no educational prerequisites and no official credit upon completion. UAH offered such courses in the hopes of encouraging white arsenal workers to attend the university and train for better

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<sup>108</sup> "U.S. Aid Said to Curb School Integration," *New York Times*, 8 March 1962, 12; and Robert E. Baker, "Rights Movement Stabs into Depths of Dixie," *Washington Post, Times Herald*, 9 September 1962, E1.

<sup>109</sup> Bill Austin, "U.S. Sues to Integrate City-County Schools for Army's Children," *Huntsville Times*, 18 January 1963, 1; and "4 Areas in South Are Sued to End Pupil Separation," *New York Times*, 19 January 1963, 1.

positions. Cashin tested the willingness of the state to extend the service to the city's African American population.<sup>110</sup>

Two months later, UAH again rejected two black students that administrators claimed did not meet admission requirements. Both men were government employees; Marvin Carroll was an electronics engineer at the Army Missile Command, and Dave McGlathery was a mathematician at Marshall. At first, the university attempted to deal with the crisis quietly. Hoping to prevent Wallace's promised "stand in the schoolhouse door," UAH officials contacted McGlathery's boss and asked him to "discourage" his employee's application, but the scientist refused to comply. Dr. Ernest Stuhlinger, a top aide to von Braun, told McGlathery that he had a right to enroll in the class. Von Braun cautioned McGlathery that he might want to consider dropping his application if it appeared he would become a "martyr," but both McGlathery and Carroll received encouragement from their superiors, and both were told that the government would pay their tuition costs.<sup>111</sup> The support from Marshall and Redstone was unsurprising. Federal programs needed highly trained technicians, and the government's support for UAH was wholly founded on the need to train workers for defense needs. By May, the men had filed suit for admission to UAH, alleging that "the university has a contract with the Government under which Federal employes are entitled to training at the center." The suit was accompanied by one from Tuscaloosa, in which three other black students, including Vivian Malone, hoped to transfer to the university.<sup>112</sup> A federal judge ruled that the Justice Department could not sue for integration for the sole purpose of abolishing discrimination. Governor George Wallace quickly

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<sup>110</sup> "Alabama Drops 6-Week Seminar after Negro Enrolls for Course," *Chicago Daily Defender*, 28 January 1963, 6.

<sup>111</sup> Claude Sitton, "Racial Test Due over Alabama U.," *New York Times*, 25 March 1963, 7.

<sup>112</sup> "Negro Scientists File Suit to Enter Alabama U. Unit," *Chicago Daily Defender*, 10 May 1963, 14; and Hedrick Smith, "Showdown Near at U. of Alabama," *Chicago Daily Defender*, 17 May 1963, 14.

asserted control, ordering the National Guard to Tuscaloosa and laying a “tight security net” of state troopers over the Huntsville branch, citing a need to prevent mob violence.<sup>113</sup>

The events in Tuscaloosa have become a well known part of the American civil rights movement narrative. Wallace’s “stand in the schoolhouse door,” the national press coverage, federal action, and the enrollment of Vivian Malone and James Hood demonstrated the courage of black students and a handful of white supporters in the face of overwhelming racist opposition, fanned by Governor Wallace. Yet in Huntsville, the quiet resolution to the desegregation crisis demonstrated the growing influence of the government reservation on local politics, and perfectly illustrates the way in which federal economic development transformed the social environment of a community as much as its business climate. As the *Washington Post* reported, Huntsville residents largely rejected Wallace in favor of “their main preoccupations – the Redstone Arsenal moon rocket project, rooting out crabgrass and wangling new Space contracts.” In fact, the city was in the process of desegregating its lunch counters, thanks to a sit-in by the local high school, a local black doctor was admitted to the local branch of the American Medical Association, and the first black policemen was appointed.<sup>114</sup> Much of the change was the direct result of the federal presence. At the municipal golf course, for instance, blacks were allotted “equal” use two days every week. The segregation of the course ended abruptly when white federal workers “swarmed in” on a day reserved for black golfers. When they returned the favor on a day reserved for whites, segregated play ended.<sup>115</sup>

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<sup>113</sup> “U.S. School Suit Rejected by Alabama Federal Court,” *Chicago Daily Defender*, 30 May 1963, 1; and “Wallace Sends Guard to Area of University,” *Washington Post, Times Herald*, 9 June 1963, A6.

<sup>114</sup> Laurence Stern, “Policies of Gov. Wallace Unpopular in Huntsville,” *Washington Post*, 10 June 1963, A1.

<sup>115</sup> S.W. Ellis to Sparkman, 18 May 1960, 355: “Mili. 4, Redstone Arsenal, 1960,” Sparkman Senate Papers, Hoole; and *Ibid.*

The desegregation of UAH was equally anti-climactic. Even as Wallace took his “stand” in Tuscaloosa, McGlathery “walked unescorted through a front door of the university’s extension center” in Huntsville. The *Chicago Defender* quoted Mayor Searcy, who said, “We do not expect trouble ... And we’re going to see that law and order is preserved.” Federalized troops were on standby alert at the local National Guard armory, but remained there, avoiding the campus. McGlathery even commented that his registration “speaks well for the city of Huntsville, the state of Alabama, and the country as a whole.” The *Washington Post* described the events in the city with optimism: “If Bull Connor and Governor Wallace speak for the dark and retrograde prejudices in the state, the youth of Alabama – Negro and white – are setting a different and brighter example for their elders.”<sup>116</sup>

The city school system prepared for an equally uneventful integration. In September 1963, four black students enrolled in white public schools. By January 1964, ten more entered for the second semester. Most of the students testing the segregated schools were the children of arsenal employees. Wallace issued a public statement against desegregation, but promised not to interfere since “Huntsville officials had not requested his help.” The *Washington Post* quoted Huntsville’s Police Chief Floyd Dyar, who called the integration “smooth as silk.”<sup>117</sup> The contrast with Tuscaloosa was telling. Granted, Huntsville did not immediately embrace civil rights. City and federal officials only addressed segregation laws and practices after the determined efforts of local African Americans. Yet in Huntsville, racial boundaries fell relatively quietly. The difference was the presence of the federal government. The arsenal and

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<sup>116</sup> “Third Student Admitted to Alabama U. at Huntsville,” *Chicago Defender*, 15 June 1963, 1; and “In Brighter Alabama,” *Washington Post, Times Herald*, 16 June 1963, E6.

<sup>117</sup> Robert E. Baker, “Now Wallace Faces a Homegrown Challenge,” *Washington Post, Times Herald*, 8 September 1963, E1; and “Huntsville, Ala., Schools Admit 10 More Negroes,” *Washington Post, Times Herald*, 28 January 1964, A2.

space center employees, recruited from across the country, created a constituency supportive of integration. The city's reliance on the continued economic health of the federal facilities meant that local leaders, from the mayor to the businessmen whose companies depended on government contracts, accepted change as a necessary part of growth. Huntsville's experience, atypical as it was, demonstrated that social change was part and parcel of the economic development that came with federal attention.

The arsenal's expansion upset Huntsville's gendered status quo as well. During World War II, local women staffed the ordnance production lines, manufacturing the chemical weapons and shells needed in the war effort. Yet with demobilization, women were replaced by returning veterans. The economic bust of the late 1940s further hurt employment opportunities for women, and the new, highly skilled research and development jobs at Redstone and Marshall held little promise for local universities struggling to train local men, let alone their wives, mothers, daughters, and sisters. As usual, the first gains for female employees came in the guise of office staff. The "lipstick set," as the *Huntsville Times* noted, benefitted from certain jobs: "clerks, typists, cashiers, waitresses, domestic servants, laboratory assistants, bookkeepers, laundry checkers."<sup>118</sup> Jobs as "laundry checkers" certainly helped the innumerable farm and low-skilled families flocking to the city for work – women in Madison County earned an average of \$3,000 per year – but secretarial jobs and lab assistant work did little to address the obvious inequalities in job training. Change occurred, though gradually. In 1963, *Huntsville Times* correspondent Bob Ward interviewed Doris W. Recob, an electronics engineer who proved that increasing numbers of women were "adding their wits to their male counterparts' brainpower."

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<sup>118</sup> Bob Ward, "Lipstick Set Here Holds 10,000 Jobs," *Huntsville Times*, 12 July 1959, D12.

Recob noted that her supervisors gave her “the opportunity for advancement and to work on my own,” a fact which, according to Ward, translated to a successful career.<sup>119</sup>

In an interview with the *Marshall Star*, Research Projects Division physicist Mary Jo Smith best exemplified how far women had come in Huntsville, as well as the barriers that remained to eventual equality. Smith had majored in physics at Texas Christian University and worked with colleagues to develop a meteoroid detection satellite that accompanied the Saturn V into orbit. Yet instead of a detailed description of her achievements, the *Star* reporter chose to note, “Nobody but her supervisor ... and her colleagues in Research Projects, would peg her as a physicist. She blends in beautifully with the secretaries in appearance.” The satellite project was “a pretty big order for a young lady, but she’s full of surprises.”<sup>120</sup> Secretaries, typists, cafeteria workers, and laundresses continued to outnumber female scientists and technicians, but women like Recob and Smith proved that career advancement was possible, despite the gendered assumptions that slowed their rise.

Redstone and Marshall forever altered the social and economic fabric of Huntsville. In little more than a decade, the city went from the depths of despair, faced with the loss of textile mills and a government munitions plant, to the center of the national missile defense and civilian space flight efforts. Highly skilled and well paid scientists spent their earnings in the city, fueling the creation of malls, shopping centers, and restaurants. They placed new stress on city services. The government funneled appropriations into the arsenal, which then liberally sprinkled dollars to a number of private contractors in the city, across the state, and throughout the country. The government’s presence was felt in the new university, a new art museum, and a

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<sup>119</sup> Ward, “Missile Maids at Arsenal,” *Huntsville Times*, 31 March 1963, C1.

<sup>120</sup> “Women Can Break Space Barrier, ... by Cultivating the Mind,” *Marshall Star* 3:23 (6 March 1963), 1, 4, in box 1, Office of Strategic Communications, Internal Communications Office, “Marshall Star,” Volumes 1-3, MSFC Papers, NARASE.

new symphony, but also in the quiet integration of the city's schools and the small but growing population of professional women staffing the labs and offices in engineering firms working on the arsenal. However, not all of the changes came from prosperity. In fact, one of the most important transformations experienced by the community came in large part thanks to the fear of economic collapse. The rapid growth of Redstone and Marshall caused concern among business leaders, afraid that depression and decommission lurked around the corner. In the 1960s, the Huntsville/Madison County Chamber of Commerce and the HIEC completed the professionalization of their industrialization campaign in the city. In doing so, the groups culminated a decades-long process by which local business leadership used the specter of government withdrawal to solidify the economic future of their city, their state, and their South.

By the early 1960s, business leaders in Huntsville had adopted many of the practices consistent with fully modernized, fully professionalized municipal development organizations. The chamber of commerce boasted a city beautification campaign, extending from downtown revitalization (the "Heart of Huntsville") and slum clearance to park construction. The chamber worked closely with technicians to reorganize traffic flow and update an aging infrastructure, and its members encouraged the municipal government to annex nearby communities in order to support the increasingly suburban nature of the city's workforce. The chamber also worked closely with the HIEC, having decided to focus solely on the economic development of Huntsville and Madison County at the expense of cooperation with regional and state groups. Encouraged by local entrepreneurs, particularly Brown Engineering's Milton K. Cummings, the HIEC and a number of associated non-profit concerns began investing in commercial real estate, building industrial facilities, staffing research parks, and accommodating the needs of prospective clients in advance of a decision to location in the area. In 1960, the HIEC began an

internal reorganization and repurposing that, when completed, signaled Huntsville's emergence as a major center of the Sunbelt economy.

In 1960, as the organization worked to cut ties with the NAA, the HIEC commissioned Fantus Area Research, Inc., a New York firm specializing in resource surveys for industrial prospects, to study the city. After several months, Fantus returned with an optimistic report, citing ten types of industry suited to Huntsville, from laboratory furniture to prefabricated housing. Huntsville had numerous advantages for industry, including favorable water resources, plentiful raw materials, low labor costs, cheap electricity, an expansive utility system, and a number of favorable plant sites. Fantus recommended continued efforts by the HIEC, even providing five possible industrial recruits, and encouraged the group to hire a development specialist and continue expanding health, education, and utility facilities to meet growing needs.<sup>121</sup>

In December, HIEC hired Guy B. Nerren as executive director. Nerren had previously served as an assistant director of industrial and community development for Mississippi's Delta Council, and immediately fixed an "economic wheel" that had become "steadily ... out of balance with the expansion of the missile-space industry and the continued dormancy of private industrial development."<sup>122</sup> Nerren went to work, accompanied by a paid staff and the continued support of HIEC's members in the business community, led by President W.L. Halsey, Jr., a wholesale grocer. In May 1961, Halsey announced that Cleveland, Ohio, firm Parker Aircraft had decided to locate a 50-man plant at the Huntsville Industrial Center, serving Marshall.<sup>123</sup>

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<sup>121</sup> "Hunt for Industry Charted by Study," *Huntsville Times*, 22 June 1960, 1, 3.

<sup>122</sup> "Industry Job Just Beginning," *Huntsville Times*, 15 August 1960, 4; and "HIEC Hires Industrial Specialist," *Huntsville Times*, 4 December 1960, 1.

<sup>123</sup> "Parker Aircraft to Locate Rocket-Parts Plant in City," *Huntsville Times*, 23 May 1961, 1.

Parker represented another business tied to the fortunes of the arsenal, but Halsey understood the need for positive action. Informed that Governor John Patterson was considering a statewide lowering of aviation fuel tax, Halsey immediately petitioned him to sign a bill on the subject. He explained that his organization was desperately working to bring in industry, increasingly dependent on air transportation and high taxes had ensured that “jet air travel has by passed Alabama.” That same month, the HIEC sponsored an amendment to Alabama’s Wallace and Cater industrial development acts that allowed the city to finance the construction of industrial plants, with bonds to be repaid from site leases.<sup>124</sup> As Halsey told the *New York Times*, “We feel that we should continue to strengthen our program of assistance to all groups of manufacturers in the Huntsville area. With all our natural advantages and with continued hard work by the people in the Huntsville area, we are confident that our industrial growth will continue.”<sup>125</sup>

In 1963, Halsey, Nerren, and other HIEC officers left for the West Coast in an ambitious recruiting drive. The trip was routine by HIEC standards, yet it exemplified both the continued push for diversification and the transformation of the HIEC into a professional booster group, highlighting the ways in which its members adapted their strategies over time. In February, they arrived in California, where they met with officials from Aerojet-General who were planning to purchase sites at Cummings Research Park alongside new tenants IBM, Lockheed, Northrup, and General Electric. While in California, the men set up meetings with executives at multiple aerospace companies, including Ford’s Aeronautic Division, Rocketdyne, and Lear Siegler. They distributed pamphlets and brochures extolling Huntsville’s general industrial climate and, more specifically, the properties at Research Park. Halsey looked to Washington for assistance,

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<sup>124</sup> Halsey to Patterson, 19 June 1961, SG14009: 2, John Patterson Administration Papers, ADAH; and “Bill to Aid HIEC Plan New Pending,” *Huntsville Times*, 30 June 1961, 1, 2.

<sup>125</sup> “Huntsville, Ala., Is Flourishing on Boom Created by Space Age,” *New York Times*, 26 November 1961, F7.

sending his itinerary to Sparkman, who wrote letters to the officials who met with them. Sparkman promised his cooperation, and many companies showed interest in moving their operations to the area.<sup>126</sup> The campaign helped solidify some of the industries already expanding in the area, including Northrup, Lockheed, and Lear Siegler. Furthermore, the HIEC proved itself adept at the art of industrial recruitment, combining publicity, personal attention, federal support, and community development in a unified drive for industry. By 1968, Research Park boasted 15 industries, 1,000,000 square feet in building space, 10,000 employees, and an annual payroll of nearly \$100 million. The 200-acre park was part of 1,500 acres owned by the UAH Foundation throughout the city, all geared towards the recruitment of new industry by the HIEC.<sup>127</sup> Having begun in 1946 with a pamphlet, the HIEC matured into a true civic booster organization, led by professional businessmen with tried and tested methods for approaching and attracting international companies to Huntsville.

NASA Administrator James E. Webb summed up Huntsville's economic transformation in an address to University of Alabama alumni at the National Press Club in 1965. He claimed that NASA had built a "Southern Crescent" with federal money that was "bound to generate a diversification of industry throughout all the Southern States" and which realized its greatest potential with "the vision and the resourcefulness of the civic and business leaders" of the city.<sup>128</sup> Webb pictured a diversified economy, one built by a combination of federal money and the local businessmen. That combination was also the goal of Huntsville's civic leaders. In 1965, local

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<sup>126</sup> Halsey, Jr., to Sparkman, 26 February 1963; "Itinerary for West Coast Trip, 17-22 February 1963," Undated, HIEC; Sparkman to Lawson, 15 March 1963; and Burns to Sparkman, 1 April 1963, 66A89-4: "Econ. 2, Industry," Sparkman Senate Papers, Hoole.

<sup>127</sup> "Huntsville Industrial Expansion Committee Meeting," 5 December 1968, 140: 2341, Bob Jones Papers, UAH.

<sup>128</sup> Untitled Address, James E. Webb, Administrator, NASA, 15 May 1965, 9-12, 18, 299: 15, Hill Papers, Hoole.

leaders could point to evidence of their success. Industries associated with Redstone and Marshall employed highly skilled workers manufacturing guidance systems, synthetic fibers, and aluminum rocket bodies. Across the Valley, factories produced fertilizer, aluminum, polyester, air conditioners, and a number of goods unconnected to the space or missile program.<sup>129</sup> In Huntsville, 1965 witnessed 4,000 added to the payrolls of the numerous defense and aerospace companies, bringing total employment at the arsenal's government and private labs to 22,000.<sup>130</sup> Redstone Arsenal, and later Marshall Space Flight Center, poured money into the city in the form of contracts, payroll, and taxes, but they were never seen by Huntsville's business leaders as a solid foundation for economic prosperity. Creating publicity pieces, investing in land, actively soliciting business, providing hospitality for visiting officials, and raising money for improvements, the HIEC attracted industries to Huntsville and created an industrial park that housed many of the aerospace industries that located in the area. Boosters could not completely wean the city from its dependence on federal money. Redstone and Marshall employed too many, and meant too much to the city's treasury. No amount of recruiting could offset the substantial growth on the government reservation. However, the work of the chamber of commerce and the HIEC, as well as NAA and TVA, created a significant number of employment alternatives across the Tennessee Valley. The "Rocket City" still felt the sting of funding cuts, yet the diversification work of the 1950s and 1960s ensured that when appropriations fell, as they would in the late 1960s and 1970s, the city experienced no serious economic dislocation, and in fact, enjoyed a foundation on which to build future prosperity.

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<sup>129</sup> Edward C. Burgs, "U.S. Business: Industry Mushrooms in North Alabama," *New York Times*, 30 May 1965, F13.

<sup>130</sup> Bob Ward, "Space Employment Spiraling," *Huntsville Times*, 2 January 1966, 1, 2.

As the federal government paid increasing attention to the city, residents faced a real transition. An influx of skilled scientists and technicians boosted the municipal economy, but demanded an expansion of city services to meet the needs of an increasingly suburban, white-collar population. Native Huntsvillians witnessed massive public works projects, including rampant annexation and downtown revitalization. Like other Valley residents, Huntsvillians also faced fundamental changes to the social fabric of their city. African Americans continued to demand equal access to the growing prosperity and opportunity, and thanks to government pressure, they realized a measure of success. Women also pushed for inclusion in the government-fed boom, making real progress even as gender boundaries proved tough to erase. Not every change worked for the betterment of the city. Despite new training opportunities, federal contracts meant skilled jobs, and Huntsville's population was largely unprepared to participate directly in the defense boom. As Sparkman, Hill, Jones, the HIEC, and others worked to bring in industry, they hoped prosperity would trickle down to those unable to obtain work in the labs, engineering firms, or contract offices. Government-based space contracts placed Huntsville firmly in the Sunbelt boom, but as with other southern communities, shadows continued to rest on large segments of the population. As city leaders and government officials relied more fully on private industry to create and sustain growth, they ensured that those shadows would continue to linger.

## CONCLUSION

“Super pour le Developpement Economique”: Federal Development in the Twenty-First Century  
Tennessee Valley<sup>1</sup>

On May 13, 2005, the Defense Department proposed relocating two major Army commands and the “bulk of the nation’s missile defense work” to Huntsville’s Redstone Arsenal as part of the Base Realignment Closure Commission’s [BRAC] recommendations. The move encompassed 4,700 families from the Washington, D.C., metropolitan area and promised growth in numerous sectors of the local economy. As in the 1960s, Huntsville became the beneficiary of federal largess, and once again, city leaders rushed to prepare for new jobs, new business, and an expanding local economy. As the BRAC decision demonstrates, the process by which the Tennessee Valley industrialized across the twentieth century remains relevant. The federal government continues to appropriate funds and direct investment to the Valley. Civic leaders still encourage federal investment, working to prepare communities for future growth while directing development towards local goals. The negotiation that characterized relations between federal, state, and local organizations continues to mark the Valley’s ongoing prosperity. Even as globalization expands and complicates the Sunbelt’s rise, Valley residents have proven more than capable of recruiting, nurturing, and sustaining economic growth, as several recent developments demonstrate.

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<sup>1</sup> Leslie Wayne, “Think Locally, Flirt Globally,” *New York Times*, 17 June 2005, <http://www.nytimes.com/2005/06/17/business/17states.html>, accessed 12 June 2009.

The BRAC announcement gave cause for celebration to Huntsville's leaders, reminiscent of the announcements of the location of Redstone Arsenal and the revitalization that accompanied the arrival of Wernher von Braun and the German rocket scientists. Senator Richard Shelby called the proposal "a big step for Huntsville and North Alabama." His colleague, Jeff Sessions, went further: "I think it reflects a belief that the city has the capacity and the economy and culture to sustain these commands and ... in the future you would see the Madison County community be a center for top defense issues."<sup>2</sup> The direct beneficiaries of the base realignment were the city's defense contractors. Lockheed-Martin moved to a \$30 million building in Cummings Research Park. As an executive for the manufacturer in Huntsville noted, "From Lockheed Martin's perspective, we recognize that there is a lot of growth potential here in the community."<sup>3</sup> The defense boom expected to accompany the BRAC decision has cemented Huntsville's reliance on Redstone Arsenal and Marshall Space Flight Center and their network of contractors spread across North Alabama. In 2008, the city boasted 40,000 aerospace and defense employees – one of every twelve Huntsvillians was a scientist, engineer, or technician. Over 200 contractors were located in the Valley, and the defense realignment will skew the imbalance even further. Despite municipal developers' best efforts, Huntsville remains heavily reliant on defense for economic growth, and the community continues to struggle to maintain its relationship with the federal government.

If the realignment served to emphasize Huntsville's overreliance on defense spending, it also highlighted the problems of a one-industry economy. Defense contractors require well educated and highly skilled employees, a fact not lost on proponents of the BRAC move.

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<sup>2</sup> Shelby G. Spires, "This Is the Biggest Step," *Huntsville Times*, 14 May 2005, A1, A6.

<sup>3</sup> Gina Hannah, "Defense Contractors Focus on Growth," *Huntsville Times*, 20 April 2008, <http://www.al.com>, accessed 12 June 2009.

Announcing the decision, *Huntsville Times* reporter Shelby G. Spires noted that the expected jobs were mostly “high-paying, white collar jobs.” Incoming families were expected to buy “homes, cars, and appliances.” As part of the larger shuffle, Redstone planned to lose the “lower wage, military trainee jobs” held by soldiers who were “rarely allowed off base.”<sup>4</sup> Granted, the base expansion has created new retail demand for the city’s shops and service industries, but many retail jobs entail extra training. Kathy Evans of the Huntsville Career Center noted the increased interest in employment in Huntsville, citing cell phone provider Verizon as an example. The company planned to employ 1,200 at a new call center in the city, but needed employees with a background in technology. Verizon officials praised Huntsville as an ideal environment for technology-based companies: “Huntsville is a growing city ... The business climate is favorable; the work force that is already there is highly skilled. That certainly fits well with our company.”<sup>5</sup> Verizon’s optimism exemplifies the kind of growth inherent in the BRAC decision, but it also belies the city’s continued economic imbalance. Defense contractors and other high-tech companies prefer educated and trained workers. For many North Alabamians, the direct benefits of the BRAC decision will have to trickle down the economic ladder.

Increased employment at Redstone, Marshall, and the Valley’s contractor companies has strained the city’s infrastructure. As with the postwar defense boom, the rapid influx of new hires caused city leaders to scramble to accommodate the incoming workers and their families. In 2008, Madison County annexed 2,000 acres in neighboring Limestone County for residential development, with 1,390 homes planned or under construction across the county. In the communities surrounding Huntsville, “affordable land” and “good schools” spurred building

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<sup>4</sup> Spires, “‘This Is the Biggest Step,’” *Huntsville Times*, 14 May 2005, A6.

<sup>5</sup> Erin Musland, “BRAC Brings Boost to Service Industry,” *Huntsville Times*, 20 April 2008, <http://www.al.com>, accessed 12 June 2009.

booms. Since 2004 (the year before the BRAC announcement), real estate closings have more than doubled in the city, and new subdivisions have quickly filled available land.<sup>6</sup> Schools have also faced increased pressure. Officials plan for the possibility of 10,000 new students in Madison County alone by 2012, in addition to the growing region's natural increase. The local school systems face a "unique dilemma" in assisting already overcrowded schools prepare for the remarkable expansion. For instance, Hazel Green, a community seeing increased interest from incoming BRAC families, must find room for 1,300 students in a school designed for 900.<sup>7</sup> In order to truly benefit from new workers, new paychecks, and a growing economy, Huntsville and its surrounding communities must expand an already taxed infrastructure. Once again, municipal leaders find themselves facing the promise and the difficulty of relying on federal investment for economic growth.

TVA, too, has continued industrial recruitment in the Valley, following a pattern similar to that begun by David Lilienthal and his successors in the postwar years. In fact, in a highly publicized recent campaign, the Authority successfully brought a Volkswagen manufacturing plant to Chattanooga, which narrowly beat out another TVA site in North Alabama. The competition arose between two Authority "megasites," tracts organized to attract national and international companies, particularly automotive manufacturers, to the Tennessee River watershed. In order to obtain the support of TVA developers, each "megasite" must have at least 700 acres of developable land; must be immediately available; must have completed environmental and geotechnical testing; must be near interstate highways, railways, and suppliers; and must have plenty of laborers within commuting distance. After receiving 26

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<sup>6</sup> Wendy Reeves, "Madison Striving to Meet Needs of BRAC"; and Steve Doyle, "From Cotton Fields to 'Fields of Homes,'" *ibid.*

<sup>7</sup> Steve Campbell, "3 School Systems Face Tough Decisions," *Huntsville Times*, 20 April 2008, <http://www.al.com>, accessed 12 June 2009.

applications, a private consulting company certified nine Valley sites, four of which have sold since 2005. TVA, in cooperation with local and state organizations, recruited Toyota, Peterbilt and Kenworth Trucks, and SeverCorr Steel to relocate to the Valley, adding billions to the regional economy. In 2008 alone, thanks largely to a Tupelo, Mississippi, Toyota plant, TVA boasted \$5.6 billion in new investment in its area of operations.<sup>8</sup> The “megasites” expanded the scope of TVA’s already vibrant site development program. In the late 1940s, faced with thousands of acres of waterfront land and no real demand for continued dam and reservoir construction, the Authority began marketing its land to manufacturers, hoping to bring jobs and paychecks to the Valley. Decades later, TVA continues to use site preparation and advertisement to improve the regional economy. Admittedly, the scale of the Authority’s work has increased: TVA’s “megasites” attract global companies, bringing billions of dollars in investments and hiring thousands to staff assembly lines. However, the underlying sentiment remains unchanged. As TVA’s Senior Vice President of Economic Development, John Bradley, told one reporter, “[Volkswagen’s decision] is an enormous economic development boost for the Tennessee Valley ... It reinforces the region’s position as a leading automotive manufacturing corridor and demonstrates once again that the Valley is a great place to do business.”<sup>9</sup>

As TVA and Huntsville demonstrate, the federal government continues to play an important role in the Valley’s economic growth, providing investment and guidance to municipal leaders. Yet perhaps the most telling example of the persistence of the development ethos in North Alabama is the continued work of regional organizations. In 1963, Tom Johnson’s North Alabama Associates reorganized as the North Alabama Industrial Development Association, yet

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<sup>8</sup> Dustin Mansfield, “VW, Toyota Latest to Buy TVA Megasites,” [July 2008], [http://tvaed.com/news/2008/vw\\_ap.htm](http://tvaed.com/news/2008/vw_ap.htm), accessed 12 June 2009.

<sup>9</sup> “Volkswagen Picks Tennessee for New U.S. Plant,” 15 July 2008, <http://www.tvaed.com/news/2008/volkswagen.htm>, accessed 12 June 2009.

the central mission remained unchanged: “[NAIDA] works with the local economic development agencies throughout North Alabama, the Alabama Development Office and many other agencies to recruit industry for North Alabama. NAIDA advertises the region’s advantages, particularly its defense infrastructure, the growing presence of automotive suppliers, and the continued strength of chemical production and processing.”<sup>10</sup> The organization still draws on a number of state and local benefits. A number of state incentives, including 20-year tax credits, construction and equipment tax abatements, and even site preparation grants encourage local growth, and as the group carefully notes, North Alabama’s labor force draws on a “hardworking agrarian lifestyle” with “a strong work ethic” that has translated into “a right to work state with little union activity.”<sup>11</sup> NAIDA represents a vibrant tradition of local and regional encouragement for economic growth in the Tennessee Valley, directing federal investment, recruiting and attracting manufacturers, and contributing to the increasingly global nature of Sunbelt growth.

As early as the 1920s, local leaders turned to economic development to build a stronger foundation for growth. Presented with the possibility of large-scale federal investment at Muscle Shoals, civic groups organized to promote the Tennessee Valley, lobbying Congress to secure funds, mobilizing support for a private lease of the properties, and recruiting industry to offset the stalled construction and operation of the dam and nitrate plants. Valley residents learned that federal money alone would not translate into secure growth. Instead, investment needed to be

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<sup>10</sup> NAIDA, “Aerospace and Defense Companies in North Alabama,” [http://northalabamausa.com/site\\_pages/is\\_aerospace\\_defense.cfm](http://northalabamausa.com/site_pages/is_aerospace_defense.cfm), accessed 12 June 2009; NAIDA, “Automotive Suppliers in North Alabama,” [http://northalabamausa.com/site\\_pages/is\\_automotive.cfm](http://northalabamausa.com/site_pages/is_automotive.cfm), accessed 12 June 2009; and NAIDA, “North Alabama Chemical Companies,” [http://www.northalabamausa.com/site\\_pages/is\\_chemicals.cfm](http://www.northalabamausa.com/site_pages/is_chemicals.cfm), accessed 12 June 2009.

<sup>11</sup> NAIDA, “Labor Force,” [http://northalabamausa.com/site\\_pages/dr\\_labor\\_force.cfm](http://northalabamausa.com/site_pages/dr_labor_force.cfm), accessed 12 June 2009; and NAIDA, “Taxes & Incentives,” [http://northalabamausa.com/site\\_pages/dr\\_taxes\\_incentives.cfm](http://northalabamausa.com/site_pages/dr_taxes_incentives.cfm), accessed 12 June 2009.

won; it had to be directed and channeled in order to meet the demands of prosperity. In this way, the fight for Muscle Shoals, in Congress and in North Alabama, provided an early lesson in the ways and means of economic growth for Valley leaders. Over the course of the 20<sup>th</sup> century, even as the government lavished attention on the region, local and regional groups continued their work to attract both federal funds and private companies.

Beginning in 1933, the Tennessee Valley Authority transformed the physical, economic, and social topography of the Southeast. Franklin Roosevelt's New Deal sought to remake the South, taming the Tennessee River to prevent floods, creating a navigation channel, generating electricity at a number of dams along the river and its tributaries, and expanding to a number of training and education programs across the region. The program began idealistically, led by Chairman Arthur Morgan, who hoped to create self-sustaining industrial-agricultural communities across the Valley. Morgan sought to create a new economy in the region, training workers for skilled labor on dam projects, educating farmers in diversified agricultural practices, and encouraging local production. Yet the chairman failed to understand the desires of local residents, forced off fertile land and, in many cases, into the towns and cities where they joined the ranks of the Depression's unemployed. David E. Lilienthal, a fellow Board member, envisioned a very different future for the region, one more closely aligned to the vision of city leaders faced with a demand for jobs, wages, and services. Lilienthal focused on power production, particularly industrial contracts for the power produced in TVA facilities. Recruiting companies to the Valley, he hoped to speed the economic transition away from cotton monoculture. Lilienthal outmaneuvered Arthur Morgan and successfully defended the Authority from attacks by private utilities. During World War II, Lilienthal's program matured as the Valley became a center for the national defense effort. He successfully translated low power

costs, cheap labor costs, and an increasingly profitable partnership with local development groups into real gains, bringing a number of federal and private companies to North Alabama.

In the 1950s and 1960s, TVA moved even farther away from its initial idealism. Left with thousands of acres of unused riverfront land and ample hydroelectric power, the Authority became a willing partner in the industrialization of the South. Agency officials encouraged the organization of state, regional, and local development associations, providing information on resources, favorable rates, and guidance. In return, organizations like the North Alabama Associates and municipal chambers of commerce contacted industries interested in relocating or expanding and facilitated their move to the region. This partnership brought thousands of jobs and millions of dollars in wages and investments to the Valley, and the cooperation between the Authority and local and regional developers played a primary role in the rise of a Sunbelt economy along the Tennessee River. Yet in its emphasis on industrial growth, TVA ignored other needs, particularly the full inclusion of the Valley's African American population and better oversight of the environmental impact of industrial policies on the watershed. The development policies led to the privatization of the Authority, creating an agency geared solely to create business growth at the expense of less tangible social improvements. In this, the agency amplified an ongoing process, begun in the fight over Muscle Shoals. TVA's shift from resource management to economic development encouraged Valley residents to continue to fight for new, prosperous communities.

In many ways, the Tennessee Valley's twentieth-century economic boom peaked in the 1950s and 1960s with the federal government's massive investment in defense research and manufacturing, best exemplified in the remarkable growth of Huntsville, Alabama. The city's cotton processing centers gave way to Redstone Arsenal, producing ordinance for the Allies

during World War II. The base threatened to close after the war, spurring municipal leaders to band together in an attempt to replace the disappearing jobs and paychecks, and in close cooperation with congressmen, Redstone Arsenal revived as a national center for missile and space technology. The facility, including the Marshall Space Flight Center, led Huntsville into the Sunbelt, providing a wealth of federally funded jobs and an assortment of public and private defense contractors. Yet Huntsville's business community understood the uncertain nature of government investment, a lesson underlined by Redstone's decommissioning after World War II. The Huntsville Industrial Expansion Committee worked to diversify the economy of North Alabama, cooperating with state and regional organizations when beneficial and competing with neighboring communities when necessary. By the 1960s, the Valley boasted a number of professional development organizations, schooled in the nature of federally funded economic growth and prepared to work for future prosperity.

Beginning with the conflict over Muscle Shoals, Valley leaders and residents actively participated in the shift from agriculture to industry. Communities across North Alabama organized development groups, encouraged federal investment, negotiated with government officials, and sought to supplement government funds with private businesses. Locals were complicit in the Sunbelt's growth, but also in its failings. Valley residents valued prosperity over social development, resisting changes that might challenge their region's appeal. As African Americans, laborers, women, and conservationists called attention to the Valley's failings, developers largely refused to address fundamental inequalities, only acceding in the face of threats to continued appropriations. The federal government played an essential role in the modernization of the southern economy in the twentieth century, but government investment alone did not create the Sunbelt. Instead, as the experience of the Tennessee Valley

demonstrates, southerners actively encouraged and contested federal plans for the region's economic future. As historians debate the continued benefits and remaining problems associated with the rise of the Sunbelt, they must confront the role of citizens in that process. Only then can the true consequences of the South's new economy be understood.

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