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**BREAKDOWN FROM WITHIN:
VIRGINIA RAILROADS DURING THE CIVIL WAR ERA**

By

**Larry E. Johnson
B.A., The College of William and Mary, 1988
M.A.T., The University of Louisville, 1994**

**A Thesis
Submitted to the Faculty of the
Graduate School of the University of Louisville
in Partial Fulfillment of the Requirements
for the Degree of**

Masters of Arts

**Department of History
University of Louisville
Louisville, Kentucky**

May 2004

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A Thesis Approved on

April 16, 2004

By the following Thesis Committee:

Thesis Director

DEDICATION

This thesis is dedicated to my wife, Holly,

and

my children,

Holly and Sarah.

You are the trinity upon which my life revolves.

ACKNOWLEDGEMENTS

I would like to thank Professor Thomas Mackey, my mentor and advisor for the support provided to me in writing this thesis. Without your guidance, careful criticism, and expert advice, this project might have died in place. Your thoughtful comments, suggestions, and the ever so timely kick in the pants kept me going. I would also like to thank my wife, Holly Morrison. To you, dear lady, I owe sincere thanks for the many journeys you made to dusty ages gone by. Your confidence in my abilities and the emotional support you provided helped to make all this possible. To my daughter Sarah, also go my thanks. You are the swan inside the duckling and I believe you too will shine. May you see this effort as a symbol of what hard work brings. To my oldest daughter, Holly, I send thanks for allowing me the privilege of watching a tender girl evolve into a beautiful young woman. Our Williamsburg years will always be priceless.

ABSTRACT

BREAKDOWN FROM WITHIN: VIRGINIA RAILROADS DURING THE CIVIL WAR ERA

Larry E. Johnson

April 16, 2004

This thesis is an examination of the Virginia railroad system during the Civil War. Using extensive and primary secondary sources, the thesis argues that the Virginia General Assembly, the Confederate Government under Jefferson Davis, and the superintendents of Virginia's carriers inadequately utilized one of the state's, and subsequently, the Confederacy's, primary assets.

This thesis consists of five chapters. Chapter one focuses on the limited historiography of Civil War railroads. Chapter two examines the Confederacy's attempts to find a government-level railroad chief. The efforts by Virginia's railroad superintendents to keep their lines operating during a time of civil war are examined in chapter three. Chapter four is a case study of the Baltimore & Ohio Railroad, the only Civil War railroad to operate in the Confederacy and the Union. Chapter five consists of conclusions.

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CHAPTER I

INTRODUCTION: HISTORIOGRAPHY AND VIRGINIA'S CIVIL WAR RAILROADS

Like field commanders, politicians during war must face uncertainty and take chances. Between 1861 – 1865, Confederate leaders did not take chances with their railroads. As a result, the Confederate war effort suffered. During the United States Civil War, three experienced and well-trained men served as railroad chiefs for the Confederacy and each man found himself frustrated by the Confederate bureaucracy. In each of the Confederate states, the central government found itself at the mercy of individual railroad superintendents or state boards of public works, each group viewing their state's economic progress and their contribution to the Civil War as one and the same. Southern railroad superintendents understood the value of their relationship to the war effort but rather than embrace the patriotic zeal that swept through the South, they contested and debated the Confederate government on every issue relative to the rails. Little cooperation emerged between the Confederate government and the Confederacy's railroads. This study argues that despite having the most sophisticated rail system in the South at the beginning of the Civil War, several factors contributed to the failure of Virginia's railroads to meet wartime needs. Serious errors in management decisions by Virginia's legislators and road company executives hurt the Confederate cause. Although Virginia's railroads escaped the first rounds of conscription, subsequent manpower drafts

drained the carriers of white workers and forced the road companies to resort to slave labor. Material misallocation and a shortage of iron prevented the railroads from operating at full capacity thereby creating a situation where the road companies turned inward and resorted to cannibalism. By the end of the Civil War, Virginia's rail system, once the pride of the South, lay in ruins.

Since the war, fire or wanton destruction have taken a toll on many Civil War records. The flames that engulfed Richmond in the closing days of the war destroyed a great deal of the original records stored at the Confederate Quartermaster and Railroad Bureau offices. Retreating Confederate and invading Union soldiers destroyed additional records. As a result, the historiography of Civil War railroads is both varied and dated. Noted historian Charles W. Ramsdell explained the problems historians encountered as they wrote about any aspect pertaining to the history of the Confederacy. For example, Ramsdell argued that to write about Confederate railroads, one had to "acquaint himself with the nature and extent of the material resources of the South before he can proceed to the more difficult task of discovering and revealing how they were organized, administered, and utilized under the Confederacy."¹ Ramsdell also advised that anyone conducting research on Confederate railroads should first obtain the "critical advice of experts and then resort to caution and prayer."² Fortunately, key primary sources survived the war and are available for study making prayer less needed than during Ramsdell's day. A great deal of the information about the railroads comes under the

¹Charles W. Ramsdell, "Some Problems Involved in Writing the History of the Confederacy," *The Journal of Southern History* 2 (May 1936): 133-147.

²Ramsdell, "Problems," 137, 139. Ramsdell expressed a hope that "enough records may turn up to enable the historian to reconstruct [the Confederacy's] story in greater part than now seems possible." He also noted that a considerable quantity of material remained available, but that too many records lay scattered through countless collections of sources.

label of historical analysis. Much of the available material needs refinement to meet the more stringent and contemporary historical standards for clarity and succinctness. However, excellent sources are available that detail the Confederacy's efforts to establish a rail system that met the ever-changing demands of war. In the last twenty years, secondary scholarly sources detailing the economic conditions present in the Confederacy have appeared to support the historical analyses.

Researchers have at their disposal various primary materials that provide insight into Virginia's Civil War-era railroads. Annual reports from Virginia's railroads are housed in the Virginia State Library in Richmond and describe the daily conditions rail company superintendents and their staffs faced daily. Also located in Richmond, the Valentine Museum possesses valuable reports and telegrams sent to and by Colonel Frederick W. Sims, the final Confederate Railroad Bureau chief.

Fortunately for history and historians, several key Confederate government documents survived the war and are available for study today. The *Acts of the General Assembly of the State of Virginia*, and the *Journal of the Congress of the Confederate States of America*, are available at library archives for research.³ The equally important *Laws and Joint Resolutions of the Last Session of the Confederate Congress* provides a year-by-year account of Confederate government operations over the course of its short history.⁴ No study of Confederate railroads is complete without the inclusion of these important primary sources.

³ *Acts of the General Assembly of the State of Virginia* (Richmond, 1863, 1863-1864). Hereafter cited as *Acts*; *Journal of the Congress of the Confederate States of America* (58th Congress, 2d Session, Document No. 234) (7 volumes, Washington, Government Printing Office, 1904-1905). Hereafter cited as *Journal*.

⁴ Charles W. Ramsdell, ed. *Laws and Joint Resolutions of the Last Session of the Confederate Congress* (November 7–March 18, 1865) *Together with the Secret Acts of Previous Congress*. (Durham: Duke University Press, 1941). Hereafter cited as *Laws*.

Another readily available source is the 128-volume *War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*. Known simply as either the *Official Records*, or the *OR*, this collection of dispatches, letters, official reports, and orders provides researchers with an intensive view of military operations at all levels of command. Included in the *OR*, for example, are dispatches that describe the complexities of moving an army of soldiers from one location to another by rail, a feat never accomplished in the United States before the Civil War. Recorded in the rich language of the day, the *Official Records* offers a look inside the minds of commanders and government officials.⁵

First person accounts found in periodicals published after the Civil War provide a source of rich details told from a variety of perspectives. Editorials from the *American Railroad Journal* present this study with a basis from which to gauge the sentiment the Union felt toward the defeated Confederacy after April 1865. In 1893, *Locomotive Engineering*, a leading railroad magazine of the time, contained an article by Carter S. Anderson, a conductor on the Virginia Central Railroad during the war. While Anderson's account of troop movement in the early days of the war is decidedly pro-Confederate, his description of a fellow conductor forced at gunpoint to operate his engine while under arrest soldiers suggests the problems civilian engineers and conductors faced during the war.⁶ In the Confederate army, memoirs left by two of General Robert E. Lee's key officers provide details that illuminate the unique technique

⁵*War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies* (Washington, D.C., 1899), I, (XII):473. Hereafter cited as *OR*. On July 21 1861, Confederate General Joseph E. Johnston used the Manassas Gap Railroad and the Orange & Alexandria Railroad to transport more than 11,000 soldiers from Winchester, Virginia, to Manassas Junction to link up with General P. G. T. Beauregard at the first battle of Bull Run in July 1861.

⁶Carter S. Anderson, "Train Running for the Confederacy," *Locomotive Engineering: A Practical Journal of Railway Motive Power and Rolling Stock* 6 (1893): 177-179.

of moving men either to a battlefield or within a theatre of operations by rail. In *Military Memoirs of a Confederate*, Lee's chief artillery officer, General E. Porter Alexander, recorded his impressions while serving with the Army of Northern Virginia (ANV) from the first battle of Manassas in 1861 to the surrender at Appomattox Courthouse in April 1865. Alexander describes in vivid detail marching across Virginia's Blue Ridge Mountains with General Thomas J. "Stonewall" Jackson during the first summer of the war. When Jackson's brigade reached the small depot at Piedmont, Virginia, the soldiers boarded rolling stock belonging to the Manassas Gap Railroad and moved by rail to reinforce General P. G. T. Beauregard at Manassas Junction in time for the first battle of Bull Run on July 21 1861.⁷ Their arrival by rail, which shaved at least two full days off the normal time required to march the sixty-mile distance from the Valley to the Manassas battlefield demonstrated the capabilities railroads offered the commander who knew best how to use them.

General James E. Longstreet employed the services of two aides. Through their memoirs of the Civil War, Colonel G. Moxley Sorrell and Major Thomas J. Goree, provided this study with two accounts of the war as seen from high-level staff positions. Sorrell, Longstreet's principal aide, wrote *Recollections of a Confederate Staff Officer*.⁸ While Colonel Sorrell's account focuses on Longstreet's tactical decisions, readers also learn about the ever-changing condition of Confederate railroads during the conflict. Late in the war, Sorrell watched as a troop train passed and noted the dilapidated condition and variety of cars and engines belonging to what once represented the best rail system in the South.

⁷E. Porter Alexander, *Military Memoirs of a Confederate* (Bloomington: Indiana University Press, 1962), 19.

The personal letters of Major Thomas J. Goree of Texas illustrate the demands placed on a General's aide. In *Longstreet's Aide: The Civil War Letters of Major Thomas J. Goree*, editor Thomas W. Cutrer provided a wonderful collection of Goree's letters written while the Major served in the Army of Northern Virginia. Fiercely loyal to Longstreet, Thomas Goree accompanied his commander through every major battle from the first battle of Manassas in 1861 to the surrender at Appomattox in 1865.⁹ As early as the winter of 1861, Goree noted with sadness that Virginia's rail system in no way resembled the once sound system he witnessed before the war.¹⁰ As Longstreet's aide, throughout the war Goree saw firsthand the destruction suffered by Virginia's railroads. His letters give this study of Virginia's railroads a first hand account of destruction from the ground level.

Supplementing Alexander's, Sorrell's, and Goree's personal accounts of the Civil War is the *Confederate Military History (CMH)*. Published in 1899, the *CMH* is a twelve-volume collection of biographies and articles written by "able writers of unquestionable Confederate record who were thoroughly united in general sentiment and whose generous labors upon separate topics would, when combined, constitute a library of Confederate military history and biography."¹¹ The primary contribution supplied by the *CMH* is its extensive number of biographical entries that describe key players in the Confederate government and army.

⁸G. Moxley Sorrell, *Recollections of a Confederate Staff Officer* (New York: Neale, 1905), 189.

⁹Thomas W. Cutrer, *Longstreet's Aide: The Civil War Letters of Major Thomas J. Goree* (Charlottesville: University Press of Virginia, 1995), 5.

¹⁰Cutrer, *Longstreet's Aide*, 57.

¹¹*Confederate Military History* (Atlanta: Confederate Publishing Company, 1899), I: i. Hereafter cited as *CMH*.

In *The War Hits Home: The Civil War in Southeastern Virginia*, Brian Steel Wills described the effects of the Civil War on the people of southeast Virginia and the difficulties they encountered as goods and materials became increasingly scarce, in large part due to inadequate rail transportation.¹² Wills focused his study on Suffolk, Virginia, a mid-sized town in 1861 that, along with Norfolk, played the role of one of southeast Virginia's two primary rail centers. Suffolk received services from the Norfolk & Petersburg line and the Seaboard & Roanoke Railroad. What made Suffolk unique was that the N&PRR entered the city on the wider, five-foot gauge track while the S&RRR operated on the narrow, four-foot, eight inch gauge.¹³ Together, the N&PRR and the S&RRR linked Suffolk and southeast Virginia with Norfolk's coastal ports as well as interior locations in southwestern Virginia and northern North Carolina.

Since the end of the Civil War, thousands of studies have described, analyzed, and interpreted the many battles and the leaders of the conflict. Railroad-related research, however, is limited. In his Pulitzer prize-winning book, *Battle Cry of Freedom*, historian James M. McPherson dedicated less than twenty pages to Confederate railroads. Perhaps the history of Civil War railroads is short on glamour or, possibly, research on the road companies is not as financially lucrative as biographies and battle studies. Important and well-written material is available, however, and the best-known examination of Confederate railroads is Robert C. Black's 1952 work, *The Railroads of the Confederacy*.¹⁴

¹²Brian Steel Wills, *The War Hits Home: The Civil War in Southeastern Virginia* (Charlottesville, Virginia: The University Press of Virginia, 2001), 3

¹³Wills, *The War Hits Home*, 17.

¹⁴Robert C. Black, *The Railroads of the Confederacy* (Chapel Hill: The University of North Carolina Press, 1952).

The Railroads of the Confederacy continues to serve as a detailed source of information on Confederate railroads. Black's work is a solid contribution to Civil War historiography and describes the administrative and physical dilemmas faced by the Confederacy as it worked to keep its rail system functioning in a combat zone. In convincing fashion, Black demonstrated that Confederate railroads, and the men who supervised them at the superintendent and government levels, failed to establish a national rail system capable of meeting civilian and military demands. Black described the continuing administrative headaches faced by each of the three men who guided the Confederacy's Railroad Bureau as the war swept through the South. Major William Shepherd Ashe (July 1861 – April 1862), Colonel William Morrill Wadley (November 1862 – June 1863), and Major Frederick William Sims (June 1863 – April 1865) served successively as the chiefs of Confederate railroad operations and each brought to the job years of experience in conducting large-scale rail operations. Black's examination provided a wealth of information about Virginia's railroads. Excellent use of Southern newspapers and periodicals, annual railroad company reports, and Confederate documents located at various state archives give the book a superior quality. A word of caution: published more than fifty years ago, *The Railroads of the Confederacy* requires researchers to use Black's work as a basis from which to begin their study into Civil War-era railroads while continuing to search for more modern studies on the rail lines.

After Black's work came Thomas Weber's 1952 *The Northern Railroads in the Civil War, 1861 – 1865* and George E. Turner's, 1953 *Victory Rode the Rails: The Strategic Place of the Railroads in the Civil War*. Published in the same year as Black's *Railroads of the Confederacy*, Weber's *Northern Railroads* described the North's

railroad operations during the Civil War. His comparison of Northern and Southern railroads revealed that the citizens of the North understood better than the Confederates the tactical value of railroads. Weber proved that the Confederate government failed to develop fully its rail system along military lines. Before the war, poorly equipped Southern rail companies suffered from shortages of cars, wheels, and iron. Weber asserted that Confederate railroads were not prepared for the war and that over the four years of conflict, the carrier's efficiency improved but little.¹⁵ Weber's contribution to this study provides valuable insight on the state of affairs in Virginia's primary railroads during the Civil War and if a fault exists with his work, it is that he failed to explain the fate of Southern railroads in the final days of the war.

In *Victory Rode the Rails*, George Turner explained the role of Civil War railroads during "their first great military test and how they met it."¹⁶ His work is steady and straightforward and the message is clear: victory in the Civil War went to the side that did a better job of maintaining and keeping in good working order its rolling stock and locomotives. Turner characterized Southern railroad policy during the war as difficult to either define or recognize, and "in no sense comprehensive, its inconsistencies frequently casting doubt on its actual existence."¹⁷ Of Northern railroad policy, Turner wrote that Union President Abraham Lincoln kept his distance from the road companies as long as they cooperated with and supported the Union Army.¹⁸ Turner employed a unique approach in *Victory Rode the Rails* and rather than answer the question of how the South

¹⁵Thomas E. Weber, *The Northern Railroads in the Civil War, 1861-1865* (New York: King's Crown Publishing, 1952), 41.

¹⁶ George E. Turner, *Victory Rode the Rails: The Strategic Place of Railroads in the Civil War* (New York: Bobbs-Merrill Company, 1953), ix.

¹⁷Turner, *Victory*, 233.

¹⁸*Ibid.*

used the railroads during the Civil War, he reversed the argument and examined the effect railroads had on the populations of the North and the South. *Victory Rode the Rails* enriched this study of Civil War railroads by bringing to light the measures and countermeasures Ashe, Wadley, and Sims conducted in order to keep the Confederate Railroad Bureau and the Southern road companies in operation.

In 1958, Edward H. Phillips published *The Lower Shenandoah Valley in the Civil War: The Impact of War Upon the Civilian Population and Upon Civilian Institutions*. Phillip's examination of the Civil War's effect on the population of the northern end of the Shenandoah Valley presents this study with a focal point for examining the effects of war in a very close and contained environment. Because mountain elevations at the northern end of the Shenandoah Valley are lower than the more southern peaks in the Appalachian chain, that end of the Valley has always been known as the "lower" valley. Distances from the western slope of the Blue Ridge Mountains and the eastern ridges of the Allegheny Mountains lessen as the Valley ends. Any event brought on by the war greatly affected the people of the region. In regards to Virginia railroads, Phillips illuminated the shaky relationship between Shenandoah Valley railroad superintendents and the military and government officials who wished to use the rails for reasons other than civilian transportation. Phillips points out, for example, that Confederate States of America President Jefferson Davis came to understand the importance of Virginia's railroads rather late in the war. By the time the Confederate legislature appropriated \$125,000 for the Manassas Gap Railroad to build a branch line extending into Winchester, the end of the war was less than eighteen months away. Rail service in Virginia continued to decline at a steady rate as Union soldiers and cavalry tore the rails

from the ties, destroyed locomotives, or burned rolling stock. Rail company efficiency declined as the war's end grew closer.¹⁹ Phillips does not contend, however, that a more effective rail system in the lower Shenandoah Valley would have ensured a Confederate victory. Rather, he believed that greater levels of railroad protection by the Confederates might have allowed the war to continue for at least two additional years past 1865.²⁰

After 1958, a shortage existed in the amount of railroad research and few book-length works appeared for scholars to use to investigate Civil War railroads. That changed in 2001 with the publication of *Railroads in the Civil War: The Impact of Management on Victory and Defeat*. Originally a doctoral thesis at Princeton University, John E. Clark expanded his dissertation on the movement of two Union and one Confederate Corps by rail from Virginia to Tennessee to fight at Chickamauga in the fall of 1863. In his preface, Clark pointed out that reports on the movement of men and material by rail in both the Union and Confederate armies have escaped serious, in-depth study.²¹ *Railroads of the Civil War* is both informative and appreciated because it comes at a time when well-written and comprehensive research on Civil War railroads is at a minimum. Clark's research enriches this study by filling in the questions left unanswered by Robert Black's study from 1952. The bibliography indicates extensive use of materials located at the Military History Institute of the United States Army War College located at Carlisle Barracks, Pennsylvania.

Along with studies that examine Civil War railroad management, other works describe the economics and labor practices involved in running a rail company. These

¹⁹Edward H. Phillips, *The Lower Shenandoah Valley in the Civil War: The Impact of War Upon the Civilian Population and Upon Civilian Institutions* (Lynchburg, Virginia: H. E. Howard Press, 1958), 124.

²⁰Phillips, *The Lower Shenandoah*, 3.

books and articles often describe the relationship between a market economy and the growing use of mechanization. For the railroads in the North and the South, profit and progress began with proper and preventive maintenance of locomotives and rolling stock. When the war began, Southern railroads operated under conditions characterized by limited supplies and resources. Additionally, conscription drained the railroads of experienced railway men who left the road companies to serve in the Confederate military. The Confederacy never recovered from this massive loss of skill and manpower. Virginia railroads, then, obtained supplies and replacement workers through alternative methods. Where many Confederate merchants commissioned experienced sailors and their fast, sleek ships in an attempt to slip through the Union naval blockade of the Southern coast, many of Virginia's railroads resorted to hiring disabled veterans and slaves.

In 1981, Fred Bateman and Thomas Weiss published *A Deplorable Scarcity: The Failure of Industrialization in the Slave Economy*. Bateman and Weiss used this closely focused study to compare economic measures used in the industrial North to the agricultural, slave-based Southern economy. Several large-scale manufacturers operated in the South during the Antebellum period but those factories never matched the output of the North. Sugar refineries, textile mills, and other industries in the North leaned more toward national markets while Southern industries focused their efforts more to satisfying local demands for products such as flour and lumber.²² Bateman and Weiss pointed out that Virginia's railroads were major contributors to the state's economy because the road

²¹John E. Clark, *Railroads in the Civil War: The Impact of Management on Victory and Defeat* (Baton Rouge: Louisiana State University Press, 2001), xi.

²²Fred Bateman and Thomas Weiss, *A Deplorable Scarcity: The Failure of Industrialization in the Slave Economy* (Chapel Hill: University of North Carolina Press, 1981), 55.

companies played a direct role in delivering goods from the producer to the buyer.²³

Before the war, goods coming to Virginia from the agricultural South or the industrial North arrived through a variety of methods. Wagons, canal boats, and trains brought goods to Virginia's main depots for shipment to markets throughout the state. The speed in which the buyer received his goods correlated directly to the time required to transfer the products from the original delivery system to the railcars. Extra waiting time resulted if the goods arrived at the depot on the rail line of a gauge different than that of the original carrier. Virginia rail company superintendents realized that problems existed with the system but they did little or nothing to improve the situation. Additionally, superintendents made neither the effort to adopt a standardized track gauge nor did they spend the necessary funds to bridge or connect gaps in the lines. Once the Union army moved into Virginia and began the systematic destruction and capture of Virginia's railroads, rail superintendents could do precious little.

In 1983, Walter Licht wrote *Working For the Railroads: The Organization of Work in the Nineteenth Century*. Licht provided an examination of the labor problems associated with Civil War railroads. His argument ran counter to Bateman and Weiss who argued that manufacturers worked to prevent a large, enfranchised work force from upsetting the delicate power balance between manufacturers and the government.²⁴ Licht presented a dual argument that effective labor relationships between manufacturers and workers were in place twenty years before the Civil War and that significant advancements in railroad mechanization occurred because the road companies created a wage system commensurate with the individual worker's experience level. The greater

²³Ibid.

²⁴Bateman and Weiss, *Deplorable Scarcity*, 29.

the wage, the greater the worker's responsibility on the job.²⁵ The railroads were the first great enterprise in the United States to introduce bureaucratic management techniques.²⁶ Licht illustrated an aspect of Civil War labor that is often overlooked by historians: the use of slaves as railroad workers. As the number of able-bodied men killed in action continued to rise, Virginia's railroads, as with all road companies in the South, turned to slave labor to ensure the trains continued to operate. The majority of Virginia's railroads hired slaves from tobacco plantations, or they purchased the slaves outright.²⁷

Bateman, Weiss, and Licht provided this examination with valuable evidence that Virginia railroads were more reactive than proactive in their daily operations. Virginia rail superintendents were not progressive enough in their pre-war practices and as conditions worsened during the war the rail companies found themselves in a position that precluded their full participation in the Confederate war effort.

In addition to the books used in this study, several articles are used to help to explain and to describe the shape of Virginia's railroads from 1861 – 1865. Like the books used in this study, many of the articles are dated.

In "The Confederate Government and the Railroads," noted historian Charles Ramsdell offered his views of the South's inability to conduct railroad operations during the war. Ramsdell believed the Confederacy lost the war not so much because it could

²⁵Walter Licht, *Working For the Railroads: The Organization of Work in the Nineteenth Century* (Princeton: Princeton University Press, 1983), 129. Weiss reported that two factors normally determined a railroad worker's wage. The exact nature of the work and the number of years employed by the company helped to determine annual salary. In the workshops, for example, blacksmiths, machinists, and boilermakers earned higher incomes than passenger train conductors, engineers, or firemen with a similar number of years on the job.

²⁶Licht, *Working For The Railroads*, 19.

²⁷Licht, *Working For The Railroads*, 71; Charles Turner, "The Richmond, Fredericksburg, and Potomac, 1861-1865," *Civil War History* 7 (Spring 1946): 111-130. The Virginia Legislature enacted legislation allowing road companies to impress slave labor where needed. Slave owners, however, often ignored the law and refused to surrender their slaves to the road companies.

not replace lost men and material as readily as the Union, but, rather, because the South existed in a "backward industrial condition."²⁸ Confederate industrial output lagged well behind that of the Union because the Southern people often grew suspicious of ideas or suggestions that proposed an extension of the government's powers into private enterprise.²⁹ Throughout the article Ramsdell repeated his contention that the Confederacy's failure to solve its railroad problems was not the sole cause of defeat. Rather, Ramsdell proved that improvements in the Confederate rail system increased only slightly the odds of a Civil War victory, particularly in Virginia where so many of the major battles occurred,

Historian Charles W. Turner's "The Virginia Central Railroad at War, 1861-1865," presented as a case study of one of Virginia's primary railroads during the Civil War. Turner described the contributions the Virginia Central Railroad made to the Confederate war effort, and reported that "the [Virginia Central] was particularly strategic in that the tracks spanned most of the eastern battle areas, carried men and material of the Valley of Virginia to and fro, and afforded the most ready contact of the Tidewater with the Piedmont and mountain regions of the state."³⁰ Turner showed that the Virginia Central survived the war only through the resiliency of its crews who quickly rebuilt or repaired what the enemy destroyed. Turner's investigation into the Civil War operations of the Virginia Central illuminates the conditions other Virginia railroads faced throughout the war. He described in clear detail the dual problems associated with running a railroad during a civil war. Virginia Central managers focused on meeting the

²⁸Charles W. Ramsdell, "The Confederate Government and the Railroads," *The American Historical Review* 22 (July 1917): 794-810.

²⁹Ramsdell, "The Confederate Government," 795.

demands for services and support from the Confederate Army. Moreover, the persistent disruptions caused by breaks in the line added to the Virginia Central's inability to meet War Department needs.

In 1957, Angus Johnston presented his views on the operating conditions found within the Virginia's rail system in the early stages of the Civil War. In "Virginia Railroads in April 1861," Johnston argued that Virginia's railroads were, indeed, well prepared for the initial phases of the war. Johnston supported his thesis by pointing out that, unlike many Southern railroads, Virginia possessed numerous car and locomotive repair and replacement facilities located throughout the state.³¹ Having these facilities benefited Virginia, but the advantage stopped there. Despite the presence of heavy maintenance facilities, Johnston asserted that too many shortcomings within each of Virginia's railroad combined to adversely affect the overall Confederate military effort. The lack of connections between lines and the shortage of replacement and repair parts brought on by the Union blockade caused Virginia's railroads to begin a downward slide from which most of the state's road companies never recovered.³² Each passing year of the war brought progressively greater levels of battle damage. Subsequently, any benefits enjoyed by Virginia's railroads at the beginning of the war slowly disappeared by 1865.

Included in this study are several dissertations that proved helpful in providing details about Virginia railroads during the Civil War. Eva Swantner's 1929 University of Wisconsin dissertation, entitled "Northern Control of Southern Railroads During the Civil War" examined the take-over of several principal Virginia railroads by the Union

³⁰Charles W. Turner, "The Virginia Central Railroad At War, 1861-1865," *The Journal of Southern History* 12 (November 1946): 510-533.

³¹Angus J. Johnston, "Virginia Railroads in April 1865," *The Journal of Southern History* 23 (August 1957): 307-330.

army during the course of the war. Her description of the methodical approach to operating captured Confederate railroads by Secretary of War Stanton's railroad chief, Herman Haupt, proved invaluable to this study as a tool to compare railroad companies.³³ Kenneth William Noe's 1990 University of Illinois at Champaign study, "Southwest Virginia, The Virginia and Tennessee Railroad, and the Union, 1816-1865" examined the effect of railroad operations on the people of southwest Virginia during the Civil War period. In particular, Noe compared the relationship between the Virginia and Tennessee Railroad and the economy and politics of that mountainous and isolated region of the state.³⁴ Noe's bibliography is extensive and provided additional bibliographical sources for this study. In 1999, Duke doctoral student Robert G. Angevine's dissertation entitled "The Railroads and the State: War, Business, and Politics in the United States to 1861," discussed the rationale behind the United State's army's involvement in railroad development in the 1820s and 1830s. Angevine's dissertation described the invaluable interaction between the government, the army, and the road companies that led to important rail developments before and during the Civil War.³⁵ Angevine's study explains how Civil War military and government planners defined the connection between future railroad operations and regional railroad-based needs from 1861 - 1865.

In "Politics, Profits, and the Public Interest: Government, Railroads, and Interest Groups 1827-1976," Robert F. Holzweiss examined the relationship between the United States government, its railroads, and interest groups over a 150 year period. Holzweiss

³²Johnston, "Virginia Railroads:" 329-330.

³³Eva Swantner, "Northern Control of Southern Railroads During the Civil War" (Ph. D. diss., The University of Wisconsin, 1929), 2.

³⁴Kenneth William Noe, "Southwest Virginia, The Virginia and Tennessee Railroad, and the Union, 1816-1865" (Ph.D. diss., The University of Illinois at Urbana-Champaign, 1990), 158.

³⁵Robert G. Angevine, "The Railroad and the State: War, Business, and Politics in the United States to 1861" (Ph. D. diss., Duke University, 1999), 83 - 115.

used this work to explain that state and local governments effectively used whatever political power they could gather in order to advance the personal economic interests of particular railroads.³⁶ Railroad superintendents in Virginia and each of the remaining Confederate states made clear to Jefferson Davis that although they wished to appear patriotic and supportive of "The Cause," their respective line's financial future and survival remained paramount to involvement in the war.

During the Civil War, the Baltimore and Ohio Railroad represented a sore spot to Virginia. The Confederacy and the Union realized the strategic and economic importance of the B&O and fought to control as many sections of its rail as possible. Fred L. Johnson focused his dissertation on the Confederate struggle to control the B&O. In "The Tracks of War: Confederate Strategic Rail Policy and the Struggle for the Baltimore and Ohio," he asserted that Confederate and Union officials simultaneously identified the B&O as a "critical communications, supply, and transportation artery."³⁷ Johnson clearly explained that Confederate control of the B&O closed down a potential invasion route into the Shenandoah Valley and provided to the railroad-deficient South an additional source of rail power.³⁸

This examination of Civil War railroads describes the actions taken by several entities to keep Virginia's railroads in operation 1861 – 1865. In addition to the describing the Confederacy's search for a permanent railroad chief, chapter two illustrates the continuing political battles conducted between the Railroad Bureau, the Quartermaster Department, the War Department, and the Confederate Congress. Chapter

³⁶Robert F. Holzweiss, "Politics, Profits, and the Public Interest: Government, Railroads, and Interest Groups 1827-1976" (Ph. D dissertation, Texas A&M University, 2001), 19 – 37.

³⁷Fred L. Johnson, "The Tracks of War: Confederate Strategic Rail Policy and the Struggle for the Baltimore and Ohio" (Ph. D. diss., Kent State University, 1999), 2.

three is an analysis of the role Virginia's civilian railroad superintendents played in their attempts to maintain operations in an environment characterized by war. Chapter four is a case study of the Baltimore & Ohio Railroad and compares the wartime performance of the B&O with Virginia's primary carriers.

Before the war, no one in Virginia predicted the state would play such a vital role in railroad operations in the Confederacy's war effort. As historian Jeffery Lash wrote, by 1860 railroads "changed the face of industrial society and provided Union and Confederate commanders with a true test of the new principles of rapid movement in warfare."³⁹ Because the Confederacy faced a deliberate allotment of railroad resources at the beginning of the war and possessed few iron mines, smelters, or foundries, goods had to be obtained from states located in the deep south or from European countries willing to sell materials. The Union coastal blockade added to the difficulty in obtaining badly needed items.⁴⁰ The Confederate Congress waited until 1863 and the manpower losses at Gettysburg and Vicksburg to enact legislation to regulate or control the railroads although signs had existed for some time indicating that the war would last longer than initially expected.⁴¹ By the summer of 1863, the Confederacy stood on weakening legs as the war turned in favor of the Union army. Northern forces continued to flood into Virginia and Confederate commanders moved to slow the enemy's advance as best they could. Like their northern counterparts, Southern soldiers tore up mile after mile of tracks, burned bridges, and destroyed vitally important locomotives and rolling stock to prevent the

³⁸Ibid.

³⁹Jeffrey N. Lash, "Civil War Irony: Confederate Commanders and the Destruction of Southern Railways," *Prologue*, (Spring 1993): 35-47.

⁴⁰Ramsdell, "The Confederate Government and the Railroads," 795.

⁴¹Black, *Railroads of the Confederacy*, 120-121.

equipment from falling into the hands of the Union army.⁴² After the war, the extensive level of destruction to many of Virginia's primary railroads required years of repair and financial recovery.

During the Civil War, seventeen railroads operated in Virginia. While each of these lines did not play a major role in transporting men or material, several primary road companies contributed directly to the Southern war effort. The Baltimore & Ohio and the Virginia Central covered the western areas of the state, including the agriculturally-rich Shenandoah Valley. To the east, the Orange and Alexandria ran south from Alexandria to link with the Manassas Gap Railroad. Running roughly parallel to Virginia's border with North Carolina, the Southside's route represented one of Virginia's primary supply lines. To the far west, the Virginia and Tennessee Railroad served the people of the state's mountain regions.

Running along Virginia's northern border with Maryland, the Baltimore and Ohio Railroad represented the primary connection between eastern and western Virginia. The Confederacy's inability to control the B&O in this politically unstable region directly contributed to the separation of the western counties from the state in 1861.⁴³ The B&O penetrated the northern reaches of the Shenandoah Valley fifteen miles from the Potomac River, crossed the Valley floor and left the state at Cumberland, Maryland. Buyers and sellers in this small corner of Virginia viewed the B&O as their link with markets in Washington, D. C., to the industrial northeast, and to markets in the Midwest.

The Virginia Central owned in excess of two hundred miles of rail lines, more than any other road company in the state. Iron rail belonging to the VCRR spanned each

⁴²Lash, *Iron Rail*, 13.

⁴³Clark, *Railroads in the Civil War*, 311.

of the eastern battle areas located inside Virginia.⁴⁴ Leaving Richmond in a northwesterly direction, the Virginia Central crossed the hilly Piedmont region of central Virginia and joined with the Orange and Alexandria at Gordonsville. The line entered the Shenandoah Valley at Rockfish Gap, approximately twenty miles west of Charlottesville. After crossing the Valley floor and passing through Staunton, the Virginia Central turned west and exited the Valley at Buffalo Gap. For more than twenty miles, the Central hugged the western foothills of the Allegheny Mountains of the Appalachian chain. The Virginia Central reached its westernmost terminus at Jackson's River, located five miles west of the lumberyards at Covington, Virginia.⁴⁵

Located in the geographical center of the state, the Orange and Alexandria Railroad departed Alexandria and proceeded south through Fairfax Courthouse before connecting with the Virginia Central. Connecting with the Virginia Central meant that supplies departing from or traveling to northern Virginia arrived at Gordonsville on the O&A and then waited further shipment to Richmond or the Shenandoah Valley aboard cars belonging to the Virginia Central.⁴⁶ As the war took its toll on the counties in central Virginia, the junction between the O&A and the Virginia Central increased in economic and tactical importance. The Confederate army had to maintain possession of the rail junction at Gordonsville or risk losing rail contact with two vitally important areas. To the west, Augusta, Rockbridge, and Rockingham counties supplied produce and livestock while Allegheny and Bath counties supplied Virginia's railroads and factories with coal.

⁴⁴Turner, "The Virginia Central," 311.

⁴⁵Before the war, lumber companies located in the Allegheny Mountains of western Virginia used the Virginia Central to transport raw lumber east to sawmills in Covington and Staunton.

⁴⁶Lash, "Joseph E. Johnston," 15.

To the east lay Richmond, the capitol of the Confederacy and Virginia's primary railyards.

Less than thirty-five miles south of Washington, D.C., the Manassas Gap Railroad branched off from the Orange and Alexandria line at Manassas Station. From the depot it shared with the O&A, the MGRR then traveled west across north-central Virginia and crossed the Blue Ridge Mountains at Thoroughfare Gap.⁴⁷ The MGRR reached its westernmost terminus five miles south of New Market.⁴⁸ More than forty miles separated New Market and Staunton, most of that distance covered by the Valley Pike, a macadamized wagon road used by Valley farmers to transport their crops to markets in towns such as Harrisonburg, Lexington, and Front Royal. Although the Valley Pike served its purpose well, no railroads operated between New Market and Staunton. This large gap between two of Virginia's main railroads taught the Confederates a deadly lesson.

The Manassas Gap Railroad, the Orange & Alexandria line, and the Virginia Central formed an iron triangle in which most of the major battles in Virginia occurred. Battles at Chancellorsville, Fredericksburg, and both battles at Bull Run occurred on ground covered by tracks from the MGRR, the O&A, and the Virginia Central. As the Union army established a more secure foothold in Virginia, the value of each of these lines and the Confederacy's ability to hold on to them greatly increased.

To the far south, the Southside Railroad left present day Hopewell, known then as City Point, and followed the James River west to Lynchburg where the line connected

⁴⁷Johnston, "Virginia Railroads," 311.

⁴⁸Ibid.

with the Virginia & Tennessee Railroad.⁴⁹ Robert E. Lee needed the Southside for two strategically important reasons. A shrewd tactician, Lee knew that Richmond's capture represented a key Union Army objective. In the event the Union army encircled Richmond, the only avenue of escape for Confederate officials stretched along the Southside's tracks. To use the Southside to transport Confederate soldiers to the western theatre increased the odds of drawing the Union Army away from war-torn central Virginia. Lee realized only too well that Virginia farmers and manufacturers desperately needed as much time as possible to harvest crops or to produce badly needed war materials such as powder for ammunition and clothing for the soldiers without the interference of the Union army.

In southeastern Virginia, the Norfolk & Petersburg Railroad and the Seaboard & Roanoke Railroad each left Norfolk, traveled west for a short distance, then separated to run in different directions. Located approximately ten miles from the North Carolina state line and sitting adjacent to the Great Dismal Swamp, Suffolk lay in a position to service Petersburg to the northwest and Norfolk to the east. The N&PRR delivered goods obtained from sea-going vessels that discharged their cargoes in Norfolk to several of Virginia's major supply stations such as Petersburg, Richmond, and Staunton. In the spring of 1862 when George McClellan pushed his Union army up Virginia's peninsula, the Confederate Army used the N&PRR to escape to Richmond and away from McClellan's clutches.⁵⁰ The Seaboard & Roanoke performed much the same role as the Norfolk & Petersburg, ferrying supplies from the coastal regions to the western mountain counties still under Confederate control.

⁴⁹Black, *Railroads*, 24.

⁵⁰Black, 147.

Virginia's Blue Ridge Mountains run north and south from the border with Maryland to the state line with Tennessee. To the west, the Appalachian Mountains extend in the same direction and in 1860, stood as a natural barrier between Virginia's Confederate sympathizers and the state's Unionists. Rugged, steep mountains and deep ravines characterize the area. Running from its northern terminus at Lynchburg, the Virginia and Tennessee line traveled south through Bristol, Virginia, and on to other locations in Tennessee.⁵¹ To the people of Floyd, Carroll, and Grayson Counties, the Virginia and Tennessee railroad represented a means of contact with the world beyond the high mountain ridges.⁵² To the Confederate government, the area offered riches that were not always visible to the eye. More deficient in flat, farmable terrain than the Piedmont region of Virginia, just under the surface of the region lay great quantities of mineral deposits government speculators anxiously wanted.⁵³ Iron ore, coal, lead, gypsum, and manganese brought added importance to the region, and miners sought a means of heavy-duty transportation to move the minerals to waiting markets throughout Virginia and the South. The V&TRR provided that transportation. Farmers regularly used the V&TRR to send goods to markets in Roanoke, Lynchburg, and Bristol. Kenneth Noe pointed out that the Virginia and Tennessee company also functioned as a major rail connection with Richmond and Norfolk.⁵⁴

The Virginia and Tennessee also played a military role during the Civil War. In June 1861, Jefferson Davis addressed a letter to Virginia Governor John Letcher explaining the value of the Virginia and Tennessee in terms of the line's ability to quickly

⁵¹Noe, "Southwest Virginia," 6; Black, *Railroads*, 61.

⁵²Also included in this collection of counties are Montgomery, Pulaski, Wythe, Smith, and Washington Counties.

⁵³Noe, "Southwest Virginia," 6.

move troops to east Tennessee in the event Union soldiers moved into that area.⁵⁵ As rail conditions deteriorated during the course of the war, the Virginia and Tennessee became the primary mover of supplies for Confederate forces in Virginia.⁵⁶ Southern forces operating in southwest Virginia throughout the conflict clearly understood and appreciated the railroad's value to the war effort.

Examining Virginia's Civil War railroads provides insight into the clash between profit and practicality. Throughout the war, Virginia's road companies played a vital role in the Confederate war effort but often fell well short of performing to their capabilities. The railroads did not become the tool of war Confederate leaders Jefferson Davis and Commanding General Robert E. Lee expected them to develop into. When the outcome of the war hung in the balance and the Confederacy clung to one thin sliver of hope that it could still win the war, the Southern government hesitated at regulating the railroads. A high-level tug of war ensued in which the rail superintendents sparred with Jefferson Davis' government over control of the road companies. When it finally became clear to the Confederate Congress that the rail superintendents refused to voluntarily meet war demands unless their respective lines gained considerable financial profit, the legislature passed a bill granting President Davis the authority to force the lines into supporting the military. Yet, Davis failed to enforce the law and the Confederate railroads slipped further into a shoddy state of affairs. When road company superintendents realized the government had no plans to prosecute them for failing to follow the newly created

⁵⁴Noe, "Southwest Virginia," viii.

⁵⁵*OR*, IV, (I): 374; Noe, "Southwest Virginia," 254; *CMH*, I, (II): 734. John Letcher was elected as Governor of Virginia in 1859, taking his seat in January 1860. An 1839 graduate of Randolph-Macon, Letcher began practicing law the same year and became the editor of the Lexington, Virginia, *Valley Star* the same year. In 1848, Letcher ran for President on the Democratic ticket. Elected to Congress in 1851, Letcher served four terms before being elected as Governor. After the war, Letcher served several months confinement in the Old Capitol Prison. He died in 1884.

regulations, they turned to running their lines as they had before the war by assigning rail priority to paying civilians and freight companies. Trains designated to transport soldiers slipped into operating schedules only where space allowed. Too many geographical gaps existed between communities throughout Virginia and shipments to the front stalled. Varying track gauges required too many man-hours to transfer materials from one line to another.

Responsibility for the failure of Virginia's railroads to operate successfully in a war environment cannot rest solely on the shoulders of the rail superintendents or the Confederate Congress. Too many Confederate army officers, untrained in proper railroad operations, sorely misunderstood the value of an effective rail system during a time of war. Senior army commanders, including Robert E. Lee, failed to fully integrate large-scale rail operations into their war plans.

Every mile of Virginia's railroads ran through combat zones that shifted in location from day to day. The story of Virginia's railroads during the Civil War is one of external conflict with the Union army and internal struggle with the very persons who should have provided unwavering support. This study focuses on the internal struggles Virginia's railroads encountered during the war and shows that the Confederate States of America did not make the best use of their most valuable assets.

⁵⁶Noe, "Southwest Virginia," 255.

CHAPTER II

THE CONFEDERACY SEARCHES FOR A RAILROAD CHIEF

By April 1861, Americans relied a great deal on their railroads. The Union and the Confederacy began the Civil War needing a rapid, heavy-hauling rail system capable of moving thousands of men and tons of materials over extended distances. The Union army employed the talents of Herman Haupt, an able and resourceful man who surprised Union President Abraham Lincoln with his extensive railroading knowledge. In the Confederacy, the story played out differently. While many Southern railroad executives possessed the expertise to manage railroads, no one individual came forward who displayed the same level of talent as Haupt. Once the war began and the Confederacy established the position of railroad chief in 1863, the Confederate Congress micro-managed rail operations to the point of interfering with every action taken by the Railroad Bureau. Civilian superintendents acted in ways that strained the relationship between their companies and the chief of the Railroad Bureau. The resulting breakdown in communications and cooperation between the Confederate Congress, the Railroad Bureau, and the civilian superintendents created a difficult environment in which Southern carriers operated. Under the supervision of the Confederate Quartermaster Department, three men guided the Railroad Bureau and each man proved only partially successful at creating an effective rail environment. Due to gross errors in management, rail misuse by Confederate Army officers, and high degrees of inter-department

bickering, railroad operations suffered in the Confederacy with the greatest degree of suffering occurring in Virginia.

In early 1861, the newly created Confederate Congress moved quickly to fill its military and civilian offices with qualified personnel. No shortage of volunteers existed and while many men sought field commissions in the army, others sought appointments to staff departments. Confederate President Jefferson Davis wanted men to head each department who possessed comparable experience in the United States Army. In January 1861, shortly after Louisiana seceded from the Union, Davis appointed Abraham C. Myers of Louisiana as the first Confederate Quartermaster General.¹ In addition to ensuring Confederate soldiers received uniforms, weapons, ammunition, and food, Colonel Myers also directed the South's railroad operations. And, like President Davis, Myers looked for someone with pre-war experience to supervise the carriers.

Colonel Myers enjoyed only limited authority over the railroads. The majority of his actions with the carriers came in the form of negotiating contracts between the Quartermaster Department and the railroad companies, and in determining transportation and hauling rates.² Myers and the superintendents agreed that the Confederate government did not possess the authority to regulate the railroads. A champion of state's rights, Myers believed the state, not the Confederate government, determined its citizen's fate, a belief he shared with Virginia's rail superintendents.³ Subsequently, Myers

¹Richard D. Goff, *Confederate Supply* (Durham: Duke University Press, 1969), 8; *Confederate Military History* (Atlanta: Confederate Publishing Company, 1899), 617. Before the war, Abraham Myers served as the United States Army Quartermaster of the Southern Department at New Orleans. Like Jefferson Davis, Myers graduated from West Point and served with distinction in the Mexican War. A staunch secessionist, Myers used his personal connections with several Confederate senators to secure the position of Confederate Quartermaster General.

²George E. Turner, *Victory Rode the Rails* (New York: Bobbs-Merrill, 1953), 108.

³Goff, *Confederate Supply*, 17. When Confederate Commissary officials asked Myers to arrange for through freight schedules, Myers balked because he believed any form of governmental control over the

established closer personal bonds with the road company managers than he did with his colleagues in the Confederate Congress.

Historian Robert Black pointed out that no organization appealed more to the issue of state's rights than Confederate railroads.⁴ Because almost all Southern railroads represented either a state's, a county's, or a municipality's financial investments and interests, once the war began, individual railroad company stockholders interpreted many of Richmond's acts as threats upon their right to conduct business without the fear of government intrusion.⁵ As long as the Davis government kept its distance from railroad affairs, the superintendents remained happy.

When the Union coastal blockade caused a shortage of materials in the Confederacy, Jefferson Davis and the rail superintendents watched as shortages mounted in the supply of rolling stock, locomotives, and other essential railroad equipment. For his part, President Davis realized Abraham Myers needed an assistant to work beside the civilian railroad executives while assisting the Quartermaster in the overall, day to day management of Confederate railroads. In mid-July, 1861, as the Union Army moved south from Washington, D. C. toward Manassas Junction, Virginia, Jefferson Davis appointed Major William S. Ashe as the Assistant Quartermaster General in charge of the Confederate rail system.⁶

William S. Ashe
July 1861 – April 1862

railroads violated the principles of free enterprise; *The War of the Rebellion: The Official Records of the Union and Confederate Armies*. 128 volumes. (Washington, D. C.: Government Printing Office, 1899) IV, (I), 314.

⁴Robert C. Black, *Railroads of the Confederacy* (Chapel Hill: The University of North Carolina Press, 1952), 64

⁵Black, *Railroads*, 64; E. Merton Coulter, *The Confederate States of America, 1861 – 1865* (Baton Rouge: Louisiana State University Press, 1950), 374.

⁶Black, *Railroads*, 65.

Robert Black described Ashe's appointment as "an excellent selection."⁷ No stranger to railroad operations, Ashe brought experience in large-scale rail operations with him to Richmond. To keep Ashe away from Richmond, and, presumably out of the Quartermaster's General's way, Myers assigned his newly appointed assistant as a traveling agent and rail inspector.⁸ Ashe, happy to remain in the field, displayed a determination that indicated he wanted to improve an organization he believed needed immediate repair.⁹ Like President Davis, Ashe chose experienced railroad men as his subordinate agents. He ensured schedules were established and followed as closely as possible. On the Virginia Central, for example, Ashe introduced daily through train schedules between Richmond and Millborough Springs in western Virginia. As the new rail chief, William Ashe dedicated himself to ensuring the railroads succeeded in supporting the Confederacy. He was in the prime of his life at age forty-six and he thoroughly enjoyed the assignments Jefferson Davis asked him to accomplish.¹⁰

While Ashe assumed Myers' responsibility of negotiating contracts with rail superintendents, he also traveled around Virginia to investigate complaints by rail officials. Ranging from requests for additional manpower to a war-induced demand for

⁷Black, *Railroads*, 65; Allen Johnson and Dumas Malone, eds. *The Dictionary of American Biography* (22 volumes, New York, 1946): I, 388. The son of aristocratic parents, before the war, Ashe represented North Carolina in the House of Representatives in Washington, D. C. In 1854, he served as the president of North Carolina's Wilmington & Weldon Railroad where he proved himself an able and aggressive leader and manager. An ardent believer in state's rights, Ashe joined forces with North Carolina's secessionists in 1861 and took a seat in the state senate soon after that state left the Union. He immediately left for Richmond upon receipt of Davis' summons to serve as the Confederate rail chief.

⁸Charles W. Ramsdell, "The Confederate Government and the Railroads," *The Historical Review* 22 (July 1917): 794-810. Ramsdell believed that Myers wished to run the Quartermaster Department almost as a one man show and did not like the idea of having Ashe anywhere near him in Richmond where Ashe could display his broader knowledge of railroad operations than Myers. The question of Ashe's authority, however, remains unclear because so many records were destroyed near the end of the war in April 1865; Turner, *Victory*, 245.

⁹Black, *Railroads*, 66. Immediately upon establishing his office in Richmond, Ashe introduced printed transportation requests in order to aid record keeping. Several of these requests are available for viewing at the National Archives in Washington, D. C.

railroad-related materials, rail supervisors also quizzed Ashe about late payments owed to the carriers by the Quartermaster Department for troop and goods shipments. The complaint he heard most often, however, centered on the Confederacy's lack of iron.¹¹ As Ashe smoothed out the problems between the carriers and the government, he noticed a slowing or blocking of rail movement caused by great traffic bottlenecks at several of Virginia's key depots. The root of the problem, as Ashe defined it, lay in the lack of a uniform track gauge running through Virginia.¹² Most Southern railroads operated on a five-foot gauge. In Virginia, lines located south of the James River operated on the five-foot gauge while carriers located north of the James operated on the narrower four-foot, eight-inch gauge.¹³ Flatcars from one company that operated on a narrow gauge too often sat for hours or days while laborers unloaded the cars and transferred the goods to the rolling stock of a railroad that operated on a wider gauge.¹⁴ Delays caused because of differing track gauges greatly affected the Confederacy's ability to transport men and materials from one point to another. Ashe believed he had a solution to the track gauge problem and knew the answer was neither simple nor cheap.

Upon his return to Richmond, Ashe proposed to Jefferson Davis and Abraham Myers a linking of Virginia's lines. Ashe realized that for the project to succeed, the road companies had to contribute considerable funds to the Quartermaster department to help cut the costs of linking the lines. When Davis rejected the proposal on the grounds the government lacked the funds to convert the entire Confederacy to the same rail gauge,

¹⁰Johnson and Malone, *American Biography*, I, 388.

¹¹Turner, *Victory*, 245.

¹²John E. Clark, *Railroads in the Civil War: The Impact of Management on Victory and Defeat* (Baton Rouge: Louisiana State University Press, 2000), 47.

¹³Black, *Railroads*, 9-10.

¹⁴Clark, *Railroads in the Civil War*, 47.

Ashe found himself caught in a balancing act between the civilians and the government.¹⁵ His job required that he ascertain the needs of the Confederacy's railroads while simultaneously determining the carrier's role in the overall war effort. Ashe realized the increased value of having the rail superintendent's support and he knew maintaining that support for the duration of the war could prove daunting. As Historian John C. Clark noted, "One grants the delicate diplomacy involved in securing the railroad's and municipalities' cooperation to meet the war's challenges, but the difficulty did not diminish the necessity."¹⁶ The absence of a connected rail system plagued the Confederacy for the remainder of the war and continued to create stoppages and delays in goods getting into the hands of Confederate soldiers and commissary agents.

Determined to be an effective railroad chief, Major Ashe traveled throughout Virginia inspecting rail facilities, freight yards and storage depots. Ashe grew dismayed over much of what he saw. In many depots, for example, Ashe saw parked freight cars used as temporary warehouses, making the rolling stock unavailable for use by the government or the army.¹⁷ As Professor Roger Pickenpaugh noted, Ashe worked hard to "break military commanders of the habit of using freight cars as storehouses."¹⁸ Everywhere he traveled in Virginia, Ashe offered suggestions to stationmasters and Quartermaster agents to help alleviate the confusion so prevalent in the rail yards. His inspections revealed that most of the men chosen earlier in the war as agents performed

¹⁵Black, *Railroads*, 65; Clark, *Railroads in the Civil War*, 47.

¹⁶Clark, *Railroads in the Civil War*, 47; OR, IV, (I), 394. Confederate Commanding General Robert E. Lee also recommended linking Virginia's railroads. To state senator Edmund T. Morris, Lee wrote, "I consider it very important to the military operations within Virginia that proper and easy connections of the several railroads passing through or terminating in Richmond or Petersburg should be made as promptly as possible. The want of these connections has seriously retarded the operations so far, and they may become more important."

¹⁷Black, *Railroads*, 67.

their jobs satisfactorily. Ashe relieved those who did not meet his standards and sent them to the army.¹⁹ To make the rail system work, however, Ashe needed more than experienced personnel. He also needed time to talk with the superintendents, time to train new personnel, and he needed the Union army to remain stationary. Time, however, was not on his side.

On July 21 1861, the Confederate and Union armies met in the first major land battle of the Civil War at the battle of Bull Run, or Manassas. For the first time in modern warfare, soldiers moved to the battlefield by rail. General P. G. T. Beauregard, commanding approximately eleven thousand infantrymen, defended the northernmost Confederate position at Manassas, Virginia. Behind Beauregard sat the large supply and Confederate rail depot at Manassas Junction. Sixty miles to the west, General Joseph E. Johnston defended the Shenandoah Valley of western Virginia with another eleven thousand men. When Union Commanding General Irvin McDowell moved south from Washington, D. C. toward Manassas Junction, Confederate Adjutant General Samuel Cooper ordered Johnston to reinforce Beauregard by moving “through Ashby’s Gap to Piedmont, a station on the Manassas Gap Road.”²⁰ Johnston placed five infantry regiments from General Thomas Jackson’s brigade onboard cars belonging to the Manassas Gap Railroad.²¹ Jackson’s soldiers arrived at Manassas Junction in time to play a major supporting role in the battle of Bull Run. Beauregard noted after the battle

¹⁸Roger Pickenpaugh, *Rescue By Rail: Troop Transfer and the Civil War in the West, 1863* (Lincoln: University of Nebraska Press, 1998), 24.

¹⁹Black, *Railroads*, 66.

²⁰OR, I, (II), 473, 478.

²¹OR, I, (II), 470-478. Additional regiments boarded upon the return of the train from Manassas Junction. Two regiments from the Seventh and Eighth Georgia boarded, followed by subsequent shipments of the Second, Fourth, and Eleventh Mississippi regiments; Black, *Railroads*, 61-62.

that “the Union rout was both general and complete.”²² Records are vague as to who planned Johnston’s rail deployment to Manassas Junction but as the Confederacy’s rail chief, William Ashe played a major role in the coordination and execution of the movement. Events moved too quickly and too successfully to have been executed by an army officer lacking rail experience.

The movement by rail of a large body of men proved the feasibility of employing railroads during the Civil War. The movement also stressed the importance of possessing good interior lines. One of the most important lessons learned from the Manassas movement was that success in railroad operations came from two distinct areas. Battle plans stood a better chance of succeeding if the railroads were used as *offensive* tools rather than only as a means of transportation. Word spread quickly through the Confederacy that not only had the road companies transported men to the Manassas battlefield but that the arrival of Johnston’s force, in the opinion of the participants, saved the day for the Confederacy. The second area focused on the importance of communication between civilian superintendents and the military commanders. Detailed and constant communication proved essential. Confederate rail operations and the Quartermaster Bureau needed a man with extensive railroading experience yet who also understood the army’s needs. In 1861, that man was William Ashe.

Despite the success of the Manassas rail movement, Ashe continued to encounter additional railroad-related difficulties at his job. In September, the Commissary Department asked Ashe to arrange for the transport of 1,000 barrels of flour from Richmond to the front in northern Virginia. Ashe contacted the agent for the Virginia Central Railroad and learned that the VCRR had no more than two freight cars in the

²² OR, I, (II), 497.

Richmond yards. The agent also informed Ashe that numerous cars still loaded with freight blocked the access in and out of the yards.²³ Ashe discovered that Confederate Army officers at Millborough and Manassas Junction hoarded empty cars belonging to the VCRR in the event they received orders to use the rails to transport their men to another battle area in Virginia.²⁴ Ashe scheduled a meeting between Virginia Central officials and the military officers at each of the depots and informed both parties that despite their fears, an adequate number of VCRR cars remained available, but only when they followed regular and timely unloading schedules. Ashe ordered depot agents to unload all cars as soon as possible to prevent future traffic tie-ups.²⁵ He departed the meeting convinced that his presence was needed more at the depots rather than the office in Richmond. Remaining in the Confederacy's capitol prevented Ashe from seeing firsthand the true condition of Virginia's railroads. Across the state, Ashe noted dilapidated depots, undermanned maintenance shops, and rolling stock and engines sitting idle because of misuse.²⁶ Ashe also grew more convinced that the government, particularly Colonel Myers and the Quartermaster Department, had to become more involved in railroad operations. To Ashe, the answer seemed obvious: the Confederate government needed to regulate the carriers.

Ashe and newly appointed Secretary of War Judah P. Benjamin worked together to find a solution to better assist the railroads and to improve rail transportation in the Confederacy. Several members of the Confederate Congress joined with Ashe and Secretary Benjamin in examining issues aimed at the reevaluating the Confederate

²³OR, I, (V), 857-858; Black, *Railroads*, 67.

²⁴Ibid.

²⁵OR, I, (V), 857-858.

railroad situation. Senator Charles M. Conrad of Louisiana introduced legislation granting Jefferson Davis the authority to regulate the railroads and to seize any carrier that refused to abide by the new legislation once it passed successfully through Congress.²⁷ The measure, however, pitted the road companies against the Confederate Congress. Confederate Senators and Representatives could ill afford to support legislation that called for the seizure of railroads in their home states. Yet, doing nothing presented an entire set of new dangers. Quartermaster General Myers continued to voice his opposition to regulation and the more time Congress debated the bill, the longer Myers had to gather legislative support to defeat the proposal once it reached the Senate floor. Senator Conrad's bill also placed the road companies in a tight situation. Superintendents realized the importance of supporting the war effort and they did not wish the people of the Confederacy to view them as unsupportive of "the Cause." Above all, the railroads wished to remain free of government regulation and to continue their operations in a manner that closely resembled their prewar days. As Black wrote, "the carriers showed early [in the war] that they expected help, not orders, from the authorities."²⁸ Conrad's bill died before the Senate in July.²⁹ Two years passed before the Confederate Congress approve another measure providing the government with some measure of control over the road companies.

After the Conrad bill failed, Secretary Benjamin agreed that Ashe needed to spend more time in the field examining the railroads and less time behind a desk in Richmond. In August 1861, Benjamin instructed Ashe to travel about the Confederacy and to "obtain

²⁶ *Journal of the Congress of the Confederate States of America* (58th Congress, 2d Session, Senate Document No. 234), 7 volumes. (Washington: Government Printing Office, 1904-1905). II; 28.

²⁷ *Journal*, Confederate States Congress, V, 432, 457.

²⁸ Black, *Railroads*, 76.

from those companies by contract the engines and cars thus imperatively required for public service. If unable to obtain [the equipment] by contract you are authorized to impress them and have a just estimate of their value made, to serve as a basis of settlement with the owners.”³⁰ Ashe traveled to Chattanooga, Tennessee, where he contacted the offices of the Georgia-owned Western & Atlantic Railroad. Several times, Ashe attempted to convince Superintendent J. S. Rowland to lease a number of the company’s surplus engines and cars. Rowland refused each of Ashe’s requests because, as the superintendent claimed, the line did not possess the equipment to spare.³¹ Under the authority granted to him by Secretary Benjamin, Ashe moved to impress the equipment and again Rowland refused to release the cars and locomotives. When Georgia Governor Joseph E. Brown learned of Ashe’s attempts to impress the company’s property, he initiated a flurry of telegrams to Secretary Benjamin at the War Department. Governor Brown promised to meet further impressment attempts with armed resistance.³² The W&ARR retained its equipment after Benjamin backed down and informed Ashe to return to Richmond.³³ In recalling Ashe and backing down to the railroads, Secretary Benjamin, the War Department, and the Confederate government paid a price. The opportunity to establish at least a modicum of control over the railroads slipped away, making future actions by the government to control the railroads very difficult. Benjamin’s backing down revealed a primary flaw with the Confederate government and its responses to civilian demands. Rather than assert and establish its own authority, whenever a central government policy or action threatened a state’s autonomy, too often

²⁹Black, *Railroads*, 77.

³⁰OR, IV, (I), 617.

³¹OR, IV, (I), 617, 634.

³²OR, IV, (I), 634.

the government deferred to the state. In the case between Ashe and the W&ARR, the Confederate government retreated to safer ground and allowed a Confederate state and a civilian-run organization to dictate terms. Secretary Benjamin's reluctance to allow Ashe to impress the equipment indicated the Confederate government did not have the authority to force the carriers into a more supportive role.

Beginning in the fall of 1861, a rift developed between Major Ashe and Colonel Myers. Based on what he saw at the depots and throughout Virginia, Ashe believed the government had no choice but to regulate the carriers. Myers, however, refused to consider the idea of the government controlling the road companies, basing his opinion on the belief that regulation damaged the tenuous relationship between the carriers and Congress.³⁴ While Secretary Benjamin agreed with Ashe, President Davis supported Myers.³⁵ By spring 1862, Myers took on many of Ashe's duties, and effectively phased the Major out of his job. Ashe resigned as the Confederacy's rail chief in April 1862.³⁶ With his departure went one of the Confederacy's more talented railroad men.

Railroad-related logistical problems plagued the Confederacy into 1862. As the rail situation in Virginia deteriorated, accusatory claims ricocheted in the halls of Congress and in the rail depots. Caught in a vicious crossfire, army officers, rail superintendents, and Colonel Myers at the Quartermaster Department blamed each other for the lack of effective rail support throughout the Confederacy. In January 1862, a

³³Turner, *Victory*, 106; *OR*, IV, (I), 634.

³⁴*OR*, I, (LII), 227-228.

³⁵Coulter, *The Confederate States of America*, 374.

³⁶Turner, *Victory*, 245; Black, *Railroads*, 70, 311, n. 15. After departing Richmond, Ashe returned to North Carolina to raise a field artillery battalion. In the evening of September 12 1862, Ashe and several other men worked a hand car over a section of track belonging to the Wilmington & Weldon line near Wrightsville Sound. A southbound freight train traveling at a high speed with no headlight slammed into the hand car, mutilating Ashe so badly that he was unrecognizable to those who knew him. Ashe died on September 14 following the amputation of his right leg.

special committee of the Confederate Provisional government convened to address railroad abuses brought forward by the army, the road companies, and the government.³⁷ Traveling primarily to depots in Virginia, the committee recommended building an increased number of depots large enough to handle the army's demands.³⁸ The committee hoped to avoid or to eliminate the delays created by goods waiting in unloaded cars for extended periods. Pointing to the fragmentary nature of Confederate railroads, the panel recommended that the Confederate government take two steps in bringing the road companies under more strict control. The council recommended that the Confederate army assume direct control of all southern railroads for the duration of the war. Additionally, the committee recommended the army accept the responsibility of maintaining and protecting the major rail supply lines coming into and departing from Richmond.³⁹ The report proved a bold step. The recommendations signaled a movement towards recognizing the Confederacy possessed a rail system capable of performing well under the correct management conditions.⁴⁰ To achieve the level effective management, however, meant regulating the railroads and therein laid the problem. Too many members of the Confederate Congress remained opposed to regulation. Despite its bold recommendations, the report did not go far toward affecting the railroads.⁴¹ As Black noted, the committee's report was "too much for the southern legislative mind. It too seriously violated the fundamental shibboleths concerning the evils of centralized

³⁷ *Journal*, Confederate States Congress, I, 654.

³⁸ *Ibid.*

³⁹ *Journal*, Confederate States Congress, I, 721; Turner, *Victory*, 245. Problems existed with having the Confederate army maintain control of the railroads. While many southern officers held engineering degrees from West Point, South Carolina's Citadel, or the University of Virginia, too many other officers had little or no formal education. Placing untrained and uneducated men in charge of the railroads created a dangerous situation.

⁴⁰ *Journal*, Confederate States Congress, I, 721.

⁴¹ *Journal*, Confederate States Congress, I, 721; *OR*, IV, (I), 884-885.

government.”⁴² The rallying cry of Southern rail superintendents resounded loudly across the Confederacy as they realized the Confederate Congress had again saved their companies from regulation. The unsure Confederate railroad situation stood at a crossroads in April 1862. In one direction waited cooperation between the government and the road companies and the rebuilding of southern railways to prewar conditions. In another direction, the railroads risked distancing themselves further from the war effort by forcing the government to consider fighting a war with little or no railroad support. Working without the aid of a chief assistant, Colonel Myers continued to favor the road companies in disagreements between the carriers and the Confederate Congress. Across the Confederacy, the rail situation degenerated dangerously close to collapse. Although depot managers and superintendents viewed their efforts at providing the army with rolling stock and engines as patriotic, they also remembered that railroads were businesses. Profits waited from government contracts and every railroad in Virginia scrambled to acquire as many agreements with the government as possible. For that reason, superintendents continued to oppose regulation because government control meant an entity outside the company dictated business. Ashe’s departure highlighted the most pressing need to face the Confederacy in late 1862. The Confederacy desperately needed a rail chief, someone who understood the intricacies of running a road company and who spoke the same language as the superintendents. Before that man took over as the rail chief, however, the Confederate House of Representatives and Senate examined the need for legislation aimed at improving the south’s railroads.

Members of the Confederate House of Representatives and the Senate who remembered William Ashe recalled his attempts to bring the railroads under government

⁴²Black, *Railroads*, 96.

control. Noted historian Charles Ramsdell described the relationship between Quartermaster General Myers and Major Ashe as having “accomplished but little toward the solution of the [railroad’s] problems.”⁴³ After Congress convened in March 1862, several Representatives and Senators took steps to improve the Confederacy’s rail problems. Representative William W. Boyce of South Carolina introduced a resolution before the House Committee on Military Affairs, asking the committee to investigate the possibility of regulating the carriers.⁴⁴ Perhaps because the Confederate Congress was in the early phases of operations, the Boyce resolution received little attention. Texas Representative Peter W. Gray introduced a similar resolution to the Confederate House followed by similar legislation introduced in the Senate by Virginia Senator William B. Preston.⁴⁵ Preston’s bill called for “the safe and expeditious transportation of troops and munitions” by the Confederate rail system and the appointment by Jefferson Davis of a railroad chief at the rank of Lieutenant Colonel.⁴⁶ Rail superintendents had two reasons to protest the Preston bill. According to provisions in the bill, the carriers were to relinquish control of their equipment to the Railroad Bureau. Additionally, no mention of reparations for damaged or lost equipment appeared in either Boyce’s or Preston’s proposals.⁴⁷ The rail superintendents viewed the legislation as a means of losing revenue and in a wartime economy, such a move was unacceptable. Road company officers, senators, and representatives squared off when Representative William Porcher Miles of South Carolina presented the bill to the House in late March where it met devastating

⁴³Ramsdell, “The Confederate Government,” 799. Ramsdell made clear that Myers had no intention of relinquishing control of the railroads unless a higher authority such as Jefferson Davis ordered him to do so.

⁴⁴*Journal*, Confederate States Congress, V, 82.

⁴⁵*Journal*, Confederate States Congress, V, 87.

⁴⁶*Journal*, Confederate States Congress, V, 251.

⁴⁷*Ibid.*

opposition from House members. By mid-April, only one of the original twelve sections of the bill remained intact. The new-watered down version of the Preston bill required the Secretary of war and civilian railroad officials to do more than hold consultations on the future of Confederate railroads.⁴⁸ Due to a lack of interest from the majority of House members, Senator Preston's bill died on the last day of the congressional session. Control of the railroads remained in the hands of the civilians, assisted by Colonel Myers and the Quartermaster Department.⁴⁹ The railroads weathered the legislative storm and rail conditions remained at the same pathetic level as before the introduction of the Preston Bill. As the days turned warmer, military operations in Virginia increased and the Union and Confederate armies prepared to fight the second summer of the war.

The summer of 1862 represented a critical time for Confederate railroads. Newly-appointed Secretary of War George W. Randolph believed, as did a number of Senators and Representatives, that the Congress needed to take action to stabilize the railroad situation. Randolph recommended to President Davis that the Quartermaster Department relinquish control of the railroads to the War Department. Randolph also suggested that Davis appoint an army officer as transportation chief with the authority to coordinate all Confederate rail operations.⁵⁰ President Davis listened to Secretary Randolph and realized the time had come to move quickly in order to stop or at least slow the railroad's downward spiral. The Confederacy's railroads needed better supervision and Colonel Myers' past performance indicated he lacked effective leadership skills. In

⁴⁸ *Journal*, Confederate States Congress, V, 152, 188, 215, 253-254.

⁴⁹ Black, *Railroads*, 99. Black described the death of the Preston Bill as "a small loss." By the time the bill reached the Senate, too little of its original form remained for the Senate to do anything with; Ramsdell, "The Confederate Government," 809. Colonel Myers, still unable to devote an adequate amount of time to the railroads, spent minimal periods on railroad matters because, as Ramsdell pointed out, "Quartermaster General Myers was a professional soldier, not a railroad man."

⁵⁰ *OR*, IV, (II), 49.

August 1862, shortly before the second battle of Manassas, and against the wishes of Colonel Myers, Jefferson Davis set out to find the man who possessed an extensive level of railroad experience. In November 1862, Davis found William M. Wadley.

William M. Wadley
December 1862 – March 1863

Historian John Clark described William Morrill Wadley as “the ablest railroad man in the Confederacy.”⁵¹ Robert Black believed that Wadley made greater strides toward improving Confederate rail problems than any other railroader in the South.⁵² Born in New Hampshire in 1815 and the son of a blacksmith, Wadley moved to Georgia in 1834 soon after his father’s death.⁵³ Well known as a reliable troubleshooter, Wadley served as the president of the Vicksburg, Shreveport, and Texas Railroad before the war. Black described Wadley as the leading railroad expert in the South who possessed “superior talents and who derived a secret satisfaction from a first-class business quarrel. He failed, however, to absorb the southern flair for diplomacy and tact.”⁵⁴ A fair and honest man, Wadley’s railroad talents set him head and shoulders above his peers. In the end, however, his northern birth came to matter more than the many railroad talents he possessed.

Jefferson Davis appointed William Wadley to the position of Assistant Adjutant General of the Confederate States in December 1862. Appointed at the rank of

⁵¹Clark, *Railroads in the Civil War*, 225.

⁵²Black, *Railroads*, 109. There is no book length biography of William M. Wadley. Black noted that Wadley’s daughter, Sarah, created the best account of the man’s life, entitled *A Brief Record of the Life of William M Wadley*, Written by His Eldest Daughter (New York, 1884). Black also recommended *The Life and Labors of William M. Wadley* (Savannah, 1885), edited by T. B. Catherwood.

⁵³Clark, *Railroads in the Civil War*, 225.

⁵⁴Black, *Railroads*, 109. Although northern-born, Wadley took many steps to imbed himself completely into the southern culture. He embraced the mannerisms of the Antebellum South without question, owned several slaves and many acres of land, and married, as Black noted, “a Savannah girl of good family.” Yet, as Black further noted, Wadley never forgot that his birthplace was in the north.

Lieutenant Colonel, Wadley's assignment presented him with a wide range of responsibilities, ranging from taking supervision and control of the transportation for the Government on all Confederate railroads to seeking the cooperation and assistance of the Quartermaster Department and the Commissary Bureau.⁵⁵ As his chief assistant, Wadley selected Captain Frederick Sims of Atlanta, a former coworker on the Central Georgia Railroad. Colonel Myers perceived Wadley as a threat to the Quartermaster General's authority.⁵⁶ Myers flooded the newly appointed Secretary of War, James A. Seddon, with letters protesting the Quartermaster Department's loss of control over the railroads. "The Control of the railroads," Myers wrote, "has been one of the most responsible duties of this department...much inconvenience, confusion, and embarrassment will result if their supervision be transferred to another department of the public service altogether unconnected with this."⁵⁷ Myers' letters to Seddon and Jefferson Davis did nothing to prevent Wadley from assuming responsibility as the Confederacy's new rail chief. Wadley planned to exercise his talents to guide the Confederate carriers in the right direction and cause them to increase the support they provided to the army and the government.

Wadley wasted no time in identifying what his office needed for success. On the job less than a week, he met in convention with forty-two Confederate road company delegates at Augusta, Georgia, on December 15, 1862.⁵⁸ Determined to make Southern railroads an effective and contributing tool to the success of the war effort, Wadley

⁵⁵OR, IV, (II), 225. General Orders, Adjutant and Inspector General's Office, Number 98, December 3, 1862; Turner, *Victory*, 245. Wadley also received authorization to make contracts with the carriers on behalf of the Confederate government.

⁵⁶OR, IV, (II), 231-232. Colonel A. C. Myers, Quartermaster General to Secretary of War James A. Seddon, Richmond, December 9, 1862.

⁵⁷Ibid.

⁵⁸OR, IV, (II), 272; Black, *Railroads*, 111.

brought two pressing issues to the table. Wadley believed Confederate railroads needed closely followed passenger and freight schedules. He also wanted the convention delegates to consider the interchange of rolling stock.⁵⁹ Breaking down into three committees on the first day of the convention, the superintendents discussed the tariff, through schedules, and the exchange of rolling stock. On the second morning of the convention, Wadley received his first taste of how difficult his job would be. The committees rejected each of his proposals and, instead, presented several of their own.⁶⁰ The superintendents had neither the desire nor the intention of loosening their hold on rolling stock, schedules, and, most importantly, the rates they charged the Confederate government to transport material and men. The tariff committee proposed wholesale increases in the rates charged to the government for moving soldiers and freight. The cost of transporting soldiers increased by one-half of one cent to a rate of two and one half cents per mile. The rate for first class materials such as ammunition increased ten cents to sixty cents per one hundred pounds for every one hundred miles transported.⁶¹ The new rates went into effect on January 1, 1863.

Wadley departed Augusta clearly disappointed, but he learned a valuable lesson from attending the convention. He understood that despite the presence of hardships caused by the war, the carriers intended to use the war to generate huge profits. Wadley realized he faced an uphill battle in making the railroads more active participants in the war effort if he lacked the superintendent's full support. As soon as he returned to Richmond, Wadley turned to Secretary of War James Seddon for assistance.

⁵⁹*OR*, IV, (II), 272-273.

⁶⁰Black, *Railroads*, 112.

⁶¹*Ibid.* The representatives also agreed to accept at face value Confederate bonds as payment for services rendered.

Wadley outlined for Secretary Seddon the Confederacy's most pressing rail problems. Wadley believed attempts by local quartermasters to dictate transportation policies resulted in overworked employees and low morale. He grew concerned that haphazard techniques used in the transfer of goods from one carrier to another placed men in danger. And, Wadley emphasized the continuing scarcity of trained railroad workers, a situation caused by Confederate conscription acts.⁶² Wadley tried to pinpoint for Secretary Seddon the most glaring of Confederate railroad deficiencies. Most importantly, however, Wadley illustrated for Seddon the cause and effect relationship between ineffective rail service and material shortages, a lack of through schedules, and what he defined as decreased motivation to support the war effort by the civilian rail executives.

To reverse the increasingly ineffective rail situation, Wadley outlined a four-step program to Seddon. For road companies that failed to meet the conditions of government contracts, Wadley recommended seizure of the line by the Confederate legislature. As soon as the government took control, Wadley proposed giving the carrier fifteen days in which "the cause of the complaint be removed, or a good and sufficient reason for such complaint be given within that time."⁶³ Once the road company relinquished control to the government, a panel of three commissioners met to conduct an inventory of the company's rolling stock and engines.⁶⁴ Wadley suggested that "the road and property taken to be returned at the end of the war in like good order and condition as when taken, and four per cent per annum to be paid semi-annually upon the cost of the work taken as

⁶²OR, IV, (II), 271-272.

⁶³OR, IV, (II), 373.

⁶⁴Ibid.

it stands upon the books of the company.”⁶⁵ Finally, Wadley proposed that the government appoint an officer to maintain an accurate record of each seized company’s earnings during its time under government control. Revenue generated while the government controlled the company went into the semiannual payment.⁶⁶ His recommendations, based on years of experience, reflect a clear understanding of the relationship between his role as a military officer and his position as the Confederacy’s rail chief. He and Secretary Seddon realized, however, that before the Confederacy solved its rail problems, the road companies needed men to perform the work.

* * * * *

Conscription acts during 1863 caused manpower shortages throughout the Confederacy. Wadley’s fears about the draft taking large numbers of men from the railroads eased when Inspector General Samuel Cooper ordered conscription officers to stay away from the railroads. “Enrolling officers,” Cooper wrote, “ will permit conscripts enrolled in the employment of railroads to remain at their duties until Colonel William M. Wadley. . . decides as to which of them it is necessary to be detailed for service in the army.”⁶⁷ Cooper’s orders saved Confederate railroads from losing large numbers of experienced personnel and provided the carriers with an advantage other entities in the Confederacy did not enjoy.

While the railroads remained immune from the draft, the problem of unloaded cars sitting idle in marshalling yards continued. During January and February 1863, freight yards in Virginia continued to pile up with unloaded cars. By March, supply movement by rail in Virginia slowed to a crawl. Black wrote that two years of war had

⁶⁵Ibid.

⁶⁶Ibid.

depleted Virginia's resources and supplies bound for Lee's Army of Northern Virginia rarely reached their destinations.⁶⁸ While Wadley grew increasingly convinced the government needed a strong railroad regulation policy, Secretary Seddon opted to have Wadley focus on other pressing issues. Weary of the bickering going on between the Railroad Bureau and the superintendents, the Secretary of War instructed Wadley to establish positive relationships with the superintendents. Seddon told Wadley that "harmony, co-operation and reasonable energy [on the railroad's part] only are required, and I trust you will at once lend all your energy and address to the accomplishment of a good understanding and the running of through lines on schedules to be arranged by yourself."⁶⁹ Wadley took Seddon's advice and contacted Virginia Central Railroad president Edmund Fontaine and superintendent C. O. Sanford of the Petersburg Railroad about maintaining freight regular schedules that resembled the faster passenger trains. Wadley received nothing but refusals from the Virginia Central and the Petersburg Railroad.⁷⁰ As long as the Confederate Congress forced Wadley to work without the assistance of regulation legislation, he could do little toward creating the efficient and effective rail system he believed the Confederacy needed in order to survive the war.

Wadley needed more than congressional legislation or increased cooperation from the superintendents to create the rail system he envisioned. By the spring of 1863, each of Virginia's railroads needed wheels, replacement parts, and most importantly, iron for

⁶⁷OR, IV, (II), 296.

⁶⁸OR, IV, (II), 457. James A. Seddon, Confederate War Department to William M. Wadley, Richmond, Virginia, 25 March 1863. Secretary of War Seddon learned that since the beginning of the war, Lee's army had received less than 400,000 pounds of meat from the Atlanta Reserves. Normally cordial to Wadley, Seddon appeared anything but genial when he questioned the rail chief about the meat shortage. Seddon believed Lee's men did not receive the meat due to "gross inattention on the part of either the railroads or on the quartermaster in carrying the meat to the trains."

⁶⁹Ibid.

⁷⁰OR, IV, (II), 457; Ramsdell, "The Confederate Government," 800; Black, *Railroads*, 117.

rails. Material prices across Virginia skyrocketed as the value of the Confederate dollar dropped to a value of twenty-five cents in gold.⁷¹ When officials at the Tredegar Iron Works in Richmond ceased filling road company orders for iron, superintendents from Virginia's larger lines petitioned the government for permission to purchase railroad-related goods from other sources. Superintendent Henry D. Whitcom of the Virginia Central, Norfolk & Petersburg president William Mahone, and John S. Barbour, president of the Orange & Alexandria, convinced the legislature to send an agent to England in search of iron. Secretary Seddon ordered Captain John Moncure Robinson to purchase oil, bearings, and nails.⁷² Robinson returned with too insignificant a supply of iron to make a difference to the railroad's supply problems. Most significantly, he returned without the tools capable of performing heavy equipment repair.⁷³

The time came for the Confederate Congress to act. When asked to increase their participation in the war effort, rail superintendents continued to stall and complained they lacked sufficient quantities of iron to perform their duties as carriers for the Confederacy. Black wrote, "it was painfully clear [by the third spring of the war] that railroad cooperation would never voluntarily exceed the limits imposed by personal interest. It was time for Congress to provide the administration with a club."⁷⁴ On April 7, 1863, Texas Senator Louis T. Wigfall introduced Senate Bill 112 calling for Confederate

⁷¹Black, *Railroads*, 118.

⁷²OR, IV, (II), 409-410; Black, *Railroads*, 27. Before the war, John M. Robinson served as the superintendent of the Seaboard & Roanoke railroad in southeastern Virginia. Robinson became well known for pig grease as a lubricant on his engines.

⁷³Ramsdell, "The Confederate Government," 804; Charles W. Turner, "The Virginia Central at War, 1861-1865," *The Journal of Southern History* 12 (November 1946): 510-533. The Union navy captured approximately twenty-five percent of the supplies Robinson brought with him from England. He unloaded the remaining seventy-five percent of the supplies in Bermuda, then slipped the goods through the Union blockade at various locations along the Southern coast.

⁷⁴Black, *Railroads*, 120.

government regulation of the railroads.⁷⁵ Under the authority of a railroad agent, road companies faced seizure by the agent if they willfully ignored government regulation.⁷⁶ Senate Bill 112 cleared the Senate in late April, followed by approval in the Confederate House before finally reaching Jefferson Davis. On May 1, the President signed into law the Railroad Act of 1863.⁷⁷ Robert Black wrote, “Wadley now had his railroad law.”⁷⁸

The Railroad Act of 1863 granted Jefferson Davis greater levels of authority over the railroads. Beginning in May, the act required each of the Confederacy’s non-state-owned railroads to support the army as much as possible. With the exception of one passenger train per day, the new law required the road companies to dedicate their time, materials, and labor toward wholesale support of the military.⁷⁹ Carriers established daily through schedules and shared rolling stock across companies. Companies that refused to cooperate with the railroad act risked having their equipment confiscated by the War Department.⁸⁰ The Railroad Act had its drawbacks, however. While Secretary Seddon and Colonel Wadley celebrated, neither anticipated two sweeping changes brought forth by the railroad law that changed the future of Confederate railroads.

⁷⁵Ramsdell, “The Confederate Government,” 800; *Journal*, Confederate States Congress, III, 259.

⁷⁶*Journal*, Confederate States Congress, III, 291.

⁷⁷*Journal*, Confederate States of America, IV, 472-473; Goff, *Confederate Supply*, 109-110. Jefferson Davis opposed government interference of private business and for some time, debated with Secretary Seddon over whether or not to sign the bill. As Goff pointed out, the railroads may have assisted Davis in making his decision. Several weeks before the bill was introduced in the Senate, the War Department negotiated a contract with several leading Confederate railroads to have 120,000 pounds of meat delivered daily to Richmond. As of April 30, with the bill still on the President’s desk, no meat had arrived in the Confederate capitol for more than a week. Davis signed the bill the next day.

⁷⁸Black, *Railroads*, 121.

⁷⁹“An Act to Facilitate Transportation for the Government,” May 1, 1863, Charles W. Ramsdell, ed., *Laws and Joint Resolutions of the Last Session of the Confederate Congress (November 7, 1864 – March 18, 1865) Together with the Secret Acts of Previous Congresses* (Durham: Duke University Press, 1941), 167-169. Hereafter cited as *Acts*.

⁸⁰*Acts*, 168; Goff, *Confederate Supply*, 110-111. Once the government seized a road company’s equipment, all conscription-age employees, by order of the Secretary Seddon acting on the authority of the President, would be forced to continue working for the railroad.

The 1863 Railroad Act returned authority for the railroads to the Quartermaster Department. Quartermaster Myers regained supervision of railroad affairs along with the authority to create regulations that governed the carriers.⁸¹ Colonel Myers reestablished friendly relations with the railroads based on the understanding that as long as Myers remained the Confederacy's Quartermaster General, he would fight regulation.⁸² Rail superintendents and presidents applauded the return of railroad authority to the Quartermaster Department. The new railroad bill signaled a return of power from the Railroad Bureau to the executive officers of each company. Additionally, road company superintendents and presidents got more than they hoped for from the new railroad bill.

The Railroad Act specifically did not mention Wadley as the rail chief nor did it extend formal recognition to the Railroad Bureau. One day after the Wigfall bill became law the Senate removed William Wadley as the Confederacy's rail chief.⁸³ Other than Secretary of War Seddon, no man worked harder to improve Confederate railroads. Unemployed, the most talented railroad man in the Confederacy lingered in Richmond for another month before retiring to Georgia. One can only imagine Wadley's disappointment.⁸⁴

⁸¹ *Acts*, 168.

⁸² Black, *Railroads*, 122.

⁸³ Black and Goff offer somewhat different versions in describing Wadley's fate. Goff, *Confederate Supply*, 111. Richard Goff opted to use the term "disposed" to describe Wadley's termination by the Confederate Congress and he offers less detail than Black on the various clauses of the Railroad Act; Black, *Railroads*, Black does a better job than Goff in explaining the Railroad Act of 1863. Black described Wadley's termination of assignment as "so astonishing an action, [yet] not a scrap of evidence has ever appeared."

⁸⁴ *Journal*, Confederate States Congress, III, 426. To say the Confederate Congress' actions stunned Wadley is an understatement. An examination of the events leading up to his dismissal illustrates the degree to which the Confederate government operated. Under the terms of the Confederate Constitution, Jefferson Davis possessed the authority to appoint military officers as cabinet and department heads. Wadley's dismissal as railroad chief stems from his commissioning date as an officer in the Confederate Army. Wadley received his commission in the fall of 1862 while the Confederate Congress was out of session. For unknown reasons, Wadley's appointment as a Lieutenant Colonel did not come up for consideration when Congress reconvened in January 1863. The appointment finally received a review on April 23 near the end of the congressional session. Jefferson Davis allowed the appointment to sit on his

William Wadley represented change and improvement to the Confederacy's railroads. During his time as the rail chief, "he accomplished little, but no one else could have done more under the circumstances. That he was one of the outstanding railway experts of the South no one could deny."⁸⁵ Although Wadley worked hard for Southern railroads, he fell short in his attempts to change the mindsets of how the superintendents viewed their roles in supporting the Confederacy. When Wadley departed Richmond near the end of May 1863, the Confederacy lost its best opportunity to solve its railroad problems. There would be no recovery.

Frederick William Sims
June 1863 – April 1865

Wadley's departure from Richmond and the Railroad Bureau set in motion the final phase of the Confederacy's search for a rail chief. Few people in the summer of 1863 correctly predicted what the coming months would bring. Where the month of May brought the defeat of Union General Joseph Hooker at Chancellorsville, Virginia, July delivered stunning Confederate defeats at Gettysburg, Pennsylvania, and Vicksburg, Mississippi. The number of battle deaths severely drained Southern manpower reserves. The beginning of the summer, however, saw the arrival of Captain Frederick Sims, the Confederacy's new supervisor of rail operations.⁸⁶ The former assistant to William

desk until the last day of April before forwarding the document to the Committee on Military Affairs. The Committee formally rejected Wadley's appointment on May 1 1863. The Committee refused Georgia Senator George Davis' petition to postpone Wadley's appointment until the following session when facts illustrating the rail chief's achievements could be examined in greater detail. Interestingly, neither Jefferson Davis nor James Seddon requested the Congress to reconsider its decision on Wadley.

⁸⁵Black, *Railroads*, 123.

⁸⁶*CMH*, IV, (II), 23, 24. Frederick William Sims was born in Washington County, Georgia, in 1823. His father served a term as Macon's mayor. At the beginning of the war, Sims served in the First Georgia Volunteer Regiment until his capture by Union naval forces at Savannah's Fort Pulaski in April 1862. Returning to Georgia through a prisoner of war exchange four months after his capture, by December gained employment with his friend from prewar days, William Wadley. *OR*, IV, (II), 579. Confederate States of America, Quartermaster Department, Richmond, June 30, 1863. In a touch of irony, Sims' orders directed that he "proceed to execute [his duties] to the like extent as his predecessor."

Wadley, Frederick Sims constituted the logical choice to serve as the Confederacy's new supervisor of rail operations.⁸⁷ Like his predecessors, Frederick Sims brought extensive prewar railroading experience to Richmond. On June 30, 1863, he received orders from the Adjutant and Inspector General's Office to assume the duties of chief inspector for all Confederate railroads.⁸⁸ To reach success at his job, Sims needed several events to occur. Foremost, he needed absolute cooperation from the civilian rail superintendents. Sims also needed an opportunity to enforce the 1863 railroad law. And, he needed consistent support from Jefferson Davis and Abraham Myers. Those were his goals: they would be difficult to reach.

In August, after serving only thirty days as the Confederate rail chief, Sims received an unexpected gift from the Davis government. From the beginning of the war, Jefferson Davis endured month after month of Abraham Myers' incompetence and inability to perform the duties of Quartermaster General.⁸⁹ Davis relieved Myers in mid-August and replaced him with General Alexander R. Lawton of Georgia.⁹⁰ A thorough

⁸⁷Pickenpaugh, *Rescue By Rail*, 25.

⁸⁸OR, IV, (II), 579. Confederate States of America, Quartermaster Department, Richmond, June 30, 1863. In a touch of irony, Sims' orders directed that he "proceed to execute [his duties] to the like extent as his predecessor."

⁸⁹Goff, *Confederate Supply*, 141-144. Goff contends that, in contrast to earlier years, the Confederate Quartermaster Department faced the 1863 campaigns in its best condition since the beginning of the war. Armies in the field received their supplies on time and in adequate quantity. As Goff explains, the Quartermaster General's dismissal, then, seems based on a long standing feud between Davis and Myers that may have had its origin when both men served in the U. S. Army. Shortly before his dismissal, Myers allegedly referred to Varina Davis, the President's wife, as a "squaw." Goff rejects the notion that Myers was relieved because of a name-calling incident. Instead, Goff reported that Davis knew the Confederate Congress planned to promote Myers, who enjoyed a great deal of congressional support, to brigadier general. President Davis had no intentions of Congress promoting anyone and instead went searching on his own for Myers' replacement. Initially, Davis approached Brigadier General Howell Cobb who refused the assignment on the grounds that the job was made all the more difficult because of the war. Davis learned of Alexander Lawton while the General recuperated in Richmond from wounds received at Antietam.

⁹⁰OR, IV, (II), 697-698, Special Orders, Adjutant and Inspector General's Office, number 187, August 7 1863; *CMH*, 618-619. An 1839 graduate of Harvard and past president of the Augusta and Savannah Railroad Company, Lawton also served in the Georgia Legislature from 1855 – 1861 when he resigned to join the Confederate Army. He received a promotion to Brigadier General later the same year.

and sensible administrator, Lawton served until the end of the war as the Confederate Quartermaster General.⁹¹ Together, Alexander Lawton and Frederick Sims made an effective team. As historian Charles Ramsdell wrote, however, “mere supervision could not make the transportation system more efficient.”⁹² Like Sims, Lawton hoped to see civilian railroad managers play a larger role in regional operations.⁹³ From the date of his appointment as the Quartermaster General, Lawton and Sims enjoyed a friendship and working relationship based on mutual respect and a talent for railroad operations.

Many of the problems that plagued William Wadley also haunted Frederick Sims. Confederate officers who possessed little or no railroad experience attempted to incorporate engines and rolling stock into their military plans. Too often, Confederate soldiers damaged rail equipment beyond repair. Like Wadley, Sims battled the superintendents over the tariff issue. Conscription diminished the number of experienced rail workers in spite of Sims’ frequent requests for their exemptions. And, like Wadley, Frederick Sims believed the key to solving the Confederacy’s rail problems lay in Confederate government regulation.

Throughout the war, too many Confederate officers assumed they understood the intricate relationship between railroads and military operations. Military planners frequently excluded experienced rail men from strategic planning, or they forced engineers and conductors to act against their better judgement. Virginia Central conductor Charles S. Anderson described how “Southern officers would sometimes, especially during the first year or so of the war, attempt to assume command of

⁹¹91 Allan Nevins, *The War For the Union* (New York: Konecky & Konecky, 1971), volume 4, “The Organized War to Victory, 1864-1865,” 241.

⁹²Ramsdell, “The Confederate Government,” 801.

⁹³Ibid.

[Confederate] trains. In 1861, a trainload of Southern soldiers came to Charlottesville from Lynchburg, over the Orange & Alexandria Railroad. It was noticed that two soldiers rode in the cab of the O&A engine, and, it seemed, had the engineer under arrest.”⁹⁴ Confederate officers such as Robert E. Lee, P. G. T. Beauregard, and Joseph E. Johnston possessed experience in integrating railroads into military operations but they were the exception.⁹⁵ By the time Sims took charge of rail operations, the problem of unskilled or poorly trained army officers abusing the rails reached a chronic stage.⁹⁶ Noted historian Allan Nevins reported that Confederate soldiers so abused rolling stock that freight and box cars returned to the parent company too far destroyed to be rebuilt.⁹⁷ The strain on Virginia’s overworked and undermanned railroads became glaringly apparent during 1863. Colonel G. Moxley Sorrell, aide to General James Longstreet, noted equipment belonging to the Virginia Central Railroad as a collection of “crazy cars – passenger, baggage, mail, coal, box, platform, all and every sort wobbling on the jumping strap iron – used for hauling good soldiers.”⁹⁸ From his office in Richmond, Sims also complained to General Lawton about the increasingly dilapidated state of the

⁹⁴Charles S. Anderson, “Train Running With the Confederacy,” *Locomotive Engineering* 6 (1893), 177-179.

⁹⁵Lash, “Civil War Irony: Confederate Commanders and the Destruction of the Southern Railways,” *Prologue* (Spring 1993), 35-47; Turner, *Victory*, 109. Turner suggested that the lack of railroad skills found in many Confederate officers stemmed from the majority of these men coming directly from civilian life to the army. At the beginning of the war, the professional soldier learned how to apply railroads to an already extensive list of talents. The civilian-turned-officer, on the other hand, had to first learn to be a soldier.

⁹⁶OR, IV, (II), 882; OR, I, (XXXIII), 1078. In February 1864, General Lawton complained to Secretary of War Seddon that delays in rail transportation were being caused by the continued deterioration of rolling stock and “by the frequent interference of commanding officers with our limited and overburdened transportation,” Clark, *Railroads in the Civil War*, 58. A search of the Official records did not yield a directive from either Secretary of War Seddon or Quartermaster General Lawton directing field commanders to cease the practice of allowing officers with little or no railroad experience to commandeer the trains.

⁹⁷Nevins, *The War For the Union*, volume 3, “The Organized War, 1863-1864,” 25.

⁹⁸G. Moxley Sorrell, *Reflections of a Confederate Staff Officer* (New York: Neale, 1917), 189.

Confederacy's railroads but little came of his protests.⁹⁹ Sims predicted that unless the Confederacy implemented preventive measures to stop the abuse of rail equipment, the railroads faced a future characterized by a scarcity of equipment.¹⁰⁰

Sims had his detractors. Like Wadley, Sims sought to maintain amicable and effective working relationships with the rail superintendents. Whenever he attempted to open a dialogue with the rail managers on the topics of schedules, labor shortages, and the growing scarcity of iron, Sims often ran into one obstacle after another. At railroad conventions or in correspondence, the superintendents rarely wished only to discuss the tariff issue and the rates paid to the carriers by the government. Most meetings between Frederick Sims and the superintendents concluded with a request that Sims convince the Confederate Congress to accept higher transportation rates.¹⁰¹ Sims came to understand that the superintendents did not see him as their peer but, rather, as their personal messenger to Jefferson Davis.

Noted Confederate military historian James I. Robertson wrote, "The Confederacy was born in chaos and never fully outgrew it."¹⁰² Nothing better supports this statement than the relationship between the Bureau of Conscription and Frederick Sims' Railroad Bureau. Just as every other business and industry in the South, neither the railroads nor the Railroad Bureau were immune from losing large numbers of men to

⁹⁹OR, IV, (III), Circular, Bureau of Conscription, Number 8, March 18, 1864.

¹⁰⁰Ibid. Sims argued that "cars never get the proper attention when from under the owner's eye, and with the present scarcity it is the true policy to husband them with care. The experience of the world is against it, and if the time ever comes when it is pursued you may reply upon all improvement in, or certainty of, transportation is destroyed."

¹⁰¹Black, *Railroads*, 168, 172. In November 1863, Sims called into convention the railroad superintendents of the South. Where Sims expected the majority of the Confederacy's rail superintendents to attend the convention, a depressingly low number of nineteen rail executives attended the Macon, Georgia meeting; OR, II, (I), 676. Sims also experienced problems with his rank. Wadley served as railroad Bureau chief at the rank of colonel. Sims assumed the same position at the rank of captain. Additionally, two of Sims' assistants, Major D. H. Wood and Major John D. Whitford outranked Sims.

¹⁰²James I. Robertson, *Stonewall Jackson, The Man, The Soldier, The Legend* (New York: MacMillan

the draft.¹⁰³ Like his government counterparts, Sims witnessed the railroads losing workers to conscription. Unless they enlisted before the Confederacy enacted conscription, many railroad employees stood by and watched as their friends and neighbors entered military service.¹⁰⁴ Highly skilled conductors and trained mechanics often requested and received draft exemptions and according to Clark, five in seven rail workers received exemptions.¹⁰⁵ Historian Brian Wills wrote, "Congress stepped in to provide for exemptions on the premise that the nation required some producers to remain at home to provide for those who would do the fighting."¹⁰⁶ Railroad superintendents viewed draft exemptions as the only way to survive the war and often complained to conscription boards that they had sent as many men as they could afford to serve in the army.¹⁰⁷ The Confederacy, however, lacked sufficient numbers of fighting men and regardless of the skills they possessed, southern conscription boards identified large

Publishing, 1997), 327.

¹⁰³Richard E. Beringer, *Why The South Lost the Civil War* (Athens, Georgia: The University of Georgia Press, 1986), 266. By December 1863, the Confederate army numbered 464,646 soldiers with an actual count of 277,970 present for duty. In comparison to conscription in the Union, Secretary of War Edwin Stanton decreed that locomotive engineers who worked for their respective railroads before the draft was enacted would be exempt from active duty. For additional information on the effects of conscription on the northern populace, see Thomas Weber, *The Northern Railroads in the Civil War, 1861-1865* (Westport, Connecticut: Greenwood Press Publishers, 1952), 130-131.

¹⁰⁴Nevins, *The War For the Union*, vol. 3, 13, n.28. The Confederate Congress passed three conscription acts. The first act, passed April 16, 1862 included all whites, ages eighteen to thirty-five. The second act, passed September 27 1862, increased the age limit to forty-five for a period of three years. The final act, passed February 11 1864, embraced all white males ages seventeen to fifty; Clark, *Railroads in the Civil War*, 54. The first Confederate conscription act was weak and allowed for government workers, slaveholders, and those holding critical occupations such as physicians and attorneys to seek and receive exemptions. In discussing these early conscription acts, Clark noted that "legions believed they qualified" for exemption.

¹⁰⁵Charles B. Dew, *Ironmaker to the Confederacy: Joseph R. Anderson and the Tredeger Iron Works* (New Haven, Connecticut: Yale University Press, 1966), 144-145; Brian Steel Wills, *The War Hits Home: The Civil War in Southeastern Virginia* (Charlottesville: The University of Virginia Press, 2001), 44-45; Clark, *Railroads in the Civil War*, 55.

¹⁰⁶Wills, *The War Hits Home*, 45.

¹⁰⁷Albert B. Moore, *Conscription and Conflict in the Confederacy* (New York: The MacMillan Company, 1924), 155, 157.

numbers of available draftees.¹⁰⁸ By the fall of 1863, draft exemptions became almost impossible to obtain. In December, Jefferson Davis informed the Confederate House of Representatives that the number of conscription-exempted men in Virginia, North Carolina, South Carolina, and Georgia totaled approximately 2,316 men.¹⁰⁹ Because most of these men worked on the railroads, when the Conscription Bureau finally struck the Railroad Bureau and the railroads, it hit especially hard. The Conscription Bureau drafted depot agents, conductors, engineers, mechanics, and a number of other railroad-related occupations in an effort to place as many men as possible on the Confederate front lines.¹¹⁰ As his frustrations mounted, Sims complained to Quartermaster General Lawton that conscription “completed what the prudence of railroad managers had begun. Today, there is not a machine-shop in the country able to do one half the work offered it for the want of men.”¹¹¹ In 1864, a Confederate statute called for drafting men in the forty-five to fifty-five year old age group for military labor details, thus increasing the supply of younger men who could serve in the combat units.¹¹²

Frederick Sims understood the need for a military draft. Surviving records illustrate Sims as a man with dual mindsets. Documents in the *Official Records*, for example, indicate Sims accepted the need for conscription because drafting men to fight aided the Confederacy as a whole. Other documents, however, do not portray Sims as sympathetic toward the draft. In October 1863, Sims grumbled to General Lawton that one cause for the shortage in railroad personnel rested with the superintendents. Sims

¹⁰⁸Clark, *Railroads in the Civil War*, 54-55; OR, I, (II), 881-882, General Orders, Adjutant's and Inspector General's Office, Number 137, October 22, 1863.

¹⁰⁹Black, *Railroads*, 173.

¹¹⁰Wills, *The War Hits Home*, 45.

¹¹¹OR, IV, (II), 881-882.

¹¹²Frank E. Vandiver, *Ploughshares Into Swords: Josiah Gorgas and Confederate Ordinance* (College Station, Texas: Texas A & M University Press, 1980), 227-228.

wrote, "in order to contract every expenditure, to meet every crisis which seemed impending, they encouraged the enlistment of their employees."¹¹³ In subsequent letters to Lawton, Sims accepted that the Confederacy's needs had priority over the Railroad Bureau's. In an 1864 letter to General Lawton, Sims pointed out that "the deficiency of locomotives is not so serious if those in the country could be thoroughly repaired. This takes mechanics and materials, which are not in the Confederacy."¹¹⁴ By February 1864, however, Sims reverted to expressing his dissatisfaction with the Conscription Bureau. In addressing the scarcity of mechanics, Sims informed Lawton that "many of them enlisted and have been killed, so that the number in the country has been constantly decreasing. This deficiency cannot be supplied as in ordinary times by the instruction of apprentices because the conscript law takes them for the Army just at the period when they are learning to be useful."¹¹⁵ Frederick Sims never discovered the solution to slowing the flood of men from the Railroad Bureau or from the Confederacy's rail lines. Conscription, however, was but one problem area facing Sims. There remained the fight in Congress over regulating the railroads.

By January 1865, the future appeared bleak for the Confederacy. Making his way north from Georgia and South Carolina, Union General William T. Sherman pushed his way toward Virginia, cutting a wide path of destruction through the South. In Virginia, Ulysses S. Grant squared off with Robert E. Lee at Petersburg and the Union noose tightened around the Confederacy. As the war entered its final winter, the rail situation in Virginia worsened. Union soldiers captured several of Virginia's main road companies. The Manassas Gap Railroad, the same line Confederate soldiers rode on to participate in

¹¹³OR, IV, (II), 882.

¹¹⁴OR, IV, (III), 227.

the first battle of Manassas, became part of the United State Military Railroad. In northern Virginia, Confederate soldiers waited extended periods to receive food rations.¹¹⁶ Quartermaster Lawton and Frederick Sims worked tirelessly to keep the trains running and Confederate soldiers fed, armed, and supplied with the items necessary to survive the winter. What they did not know was that with the coming congressional session, they were set to take part in the legislative process that, in the end, resulted in regulation.

In January 1865, the Confederate Congress addressed two pressing matters they believed might save the Confederacy from certain ruin. To reinforce an army that had very few extra soldiers, the Confederate Congress passed legislation calling for the conscription of slaves into the army and construction battalions.¹¹⁷ On January 11 Tennessee Representative James McCallum asked the House Military Affairs Committee to investigate further the state of the eroding Confederate railroads. Known as the McCallum Resolution, the bill called for government possession of all railroads deemed indispensable to the Confederacy. Additional requirements called for the government to take on the costs of repairing the major lines still in operation.¹¹⁸ In January 1865, the Virginia Central, the Southside, and the Seaboard & Roanoke represented the state's primary road companies. McCallum's bill also called for the Confederate government to conduct a large-scale seizure of all rail, rolling stock, and other train-related materials

¹¹⁵OR, IV, (III), 1091-1093.

¹¹⁶OR, IV, (II), 883. In January 1865, Lee and his men relied on rations delivered from depots as far away as Georgia.

¹¹⁷Nevins, *The War For the Union*, vol. 4, "The Organized War to Victory, 1864 –1865", 278. Jefferson Davis, with Lee's urging, wasted no time in signing the bill. Based on voluntary enlistment, the bill called for slave owners to seek volunteers between the ages of eighteen and forty-five. The legislation, however, like so many other Confederate legislative acts, fell short of its original intent. Despite the critical need for fighting men in the Confederacy, slave owners were not required to volunteer their slaves. Additionally, slaves who volunteered were not guaranteed freedom.

deemed essential to the successful conduct of the Confederacy's railroads. Finally, the McCallum Resolution called for a renewed program of railroad construction designed specifically to support the military.¹¹⁹ Although the resolution called for little that was new, the House adopted the proposal.¹²⁰ The War Department under the guidance of John Breckinridge and the Senate took matters a step further and on January 24, asked President Davis to produce a list of railroads, "if there be any, whose repairs and construction, in his opinion, will be necessary for military purposes."¹²¹ Davis forwarded the request to Sims who unexplainably waited until almost the middle of February to reply. Perhaps Sims had grown tired of the constant battle over the railroads: his response to Davis certainly suggested a weary stance. Writing on February 11, Sims did little more than restate his earlier, and well-known views. He reiterated to Davis the difficulties encountered by the railroads resulting from shortages in railroad materials and mechanics. Additionally, Sims informed the President that, "Your earnest attention is called to the entire absence of responsibility of railroad officers to any military authority. It is true there is a kind of moral influence exercised over them rather from some undefined idea that the hands of Government can reach them than under from any other cause. The public and indeed most of the officers are under the impression that your Bureau has supreme power over all the railroads and trains in the Confederacy, and has but to order them at your will to any point you desire."¹²² Sims informed Davis that railroads throughout the Confederacy received little protection from the army, which,

¹¹⁸ *Journal*, Confederate States Congress, VII, 442.

¹¹⁹ *Ibid.*

¹²⁰ Black, *Railroads*, 279.

¹²¹ *OR*, IV, (III), 1095-1096.

¹²² *OR*, IV, (III), 1091-1093.

“seems strange, when not only their comfort but their safety depends on its efficiency.”¹²³

Frederick Sims and William Wadley resembled each other in many ways but Sims' correspondence during the latter stages of the war illustrates one primary difference. Where Wadley worked tirelessly and he refused to give up on what he believed was best for the Southern railroads, Frederick Sims' letters depict him as disillusioned and disheartened over the war's effects on the Confederate rail system. Wadley reacted immediately on all railroad matters and acted promptly to ensure quick action, during the final winter of the war yet Sims allowed his despondency to influence his actions. Because so many railroad records were destroyed at war's end, it may never be known what caused Sims forlorn state. Perhaps he realized the end of the war was near and that he failed in his mission to create an effective state of railroad affairs in the Confederacy. Whatever the cause for his depressed feelings, to his credit, Sims continued to work with Alexander Lawton to keep Confederate railroads running.

The Confederate Congress, finally shaking off its habit of moving so slowly that effective legislation often died for want of attention, opted to move without Jefferson Davis' input on the new railroad bill. The new railroad bill required no more than four days to pass through the House of Representatives and the Senate.¹²⁴ Jefferson Davis waited the full ten-day period before signing the bill on February 28.¹²⁵ Finally, a railroad bill existed that required full cooperation and participation by the railroads. After so long a journey, the Confederacy had its first full-blown railroad law.

¹²³Ibid.

¹²⁴*Journal*, Confederate States, IV, 573-574. The McCallum Bill cleared the House by a vote of 58 to 18. The Senate voted unanimously to support the bill.

¹²⁵*Journal*, Confederate States of America, IV, 660.

Powerfully worded, the new law provided an act to provide troop, supply, and munitions transportation on all Confederate railroads.¹²⁶ Before 1865, when road companies failed to meet government requirements, they received little more than the threat of facing government sanctions. The McCallum Bill changed the manner in which the Confederate government treated the carriers. The new legislation required civilian railroad workers to enlist in the Confederate Army. "When the Secretary of War shall take charge of any railroad," the bill stated, "the officers, agents, and employees of such company. . . shall be considered as forming a part of the land forces of the Confederacy and as serving its armies in the field while such road is employed for the use of the Government."¹²⁷ Railroads deemed "needy" by the Railroad Bureau received aid from the government while any line that suffered damage resulting from abuse occurred during military possession received funds to pay for their losses.¹²⁸ No mention is made in the *Journal* of the Confederate Congress, however, as to where the government planned to find the needed funds.¹²⁹

The presence of a strong railway law awakened the railroad chief. The first enforcement of the new railroad law occurred in Virginia on the Southside Railroad west of Richmond in March. By mid-March, severe congestion on the Southside forced the government to seize company equipment, causing Southside president Lemuel Peebles to complain that the Railroad Bureau planned to "take possession of that end of this road from Lynchburg to Burkeville, by order of the War department. I think the thing a high-

¹²⁶ *Journal*, Confederate States Congress, VII, 584-586. The bill also covered the Confederacy's canals and steamboat lines.

¹²⁷ *Journal*, Confederate States of America, VII, 584-586.

¹²⁸ *Ibid.*

¹²⁹ One question that begs attention is the whereabouts of Frederick Sims during the time the McCallum bill worked its way through the Confederate Congress. The *Official Records* provides no records indicating that Sims traveled away from Richmond during the two weeks the bill passed through Congress.

handed measure.”¹³⁰ In Virginia, no railroad other than the Southside suffered government-directed seizure of its equipment. With the Union Army squeezing the Confederates into an ever-tightening circle, insufficient time remained in the life of the Confederacy to seize additional railroads.

Robert E. Lee evacuated Richmond on the night of Sunday, April 2 1865. As deliberately set fires burned much of the downtown district, Jefferson Davis and his entire cabinet, with the exception of Secretary of War Breckinridge, boarded cars belonging to the Richmond & Danville Railroad. Davis and his entourage, which included Frederick Sims and Alexander Lawton, hoped to make their way as far west as possible to avoid capture by the Union army. In his arms, Frederick Sims clutched a small bundle of Railroad Bureau documents.¹³¹ On April 9, General Lee surrendered to General Grant and the Civil War ended. Sims and Quartermaster General Lawton made their way to Charlotte, North Carolina, where both received their formal paroles on May 12, 1865.¹³² As Black wrote, “By this time all that remained of the Confederate States Railroad Bureau was a mass of rain-sodden papers which the Federal quartermasters were packing for shipment to Washington with the rest of the captured rebel archives.”¹³³

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Through four terrible years of civil war, the Confederacy struggled to create an effective railroad policy and to find the right person to supervise and manage the rails on

¹³⁰OR, I, (XLVI), 1335. The War Department also replaced the Southside’s under-powered engines with more powerful locomotives. Peebles remained unhappy although there was little he could do but complain. Additionally, officer from the Orange & Alexandria, and the Virginia Central remained uncooperative and indignant. President John S. Barbour of the O&A and Edmund Fontaine of the Virginia Central informed Secretary of War Breckinridge that since their lines were required to haul troops and munitions over longer distances, the government faced higher transportation rates.

¹³¹OR, I, (XLVI), I, 1389

¹³²Black, *Railroads*, 286.

¹³³Black, *Railroads*, 286-287.

a national level. Until early 1865, the Confederacy lacked a rail policy that allowed for government regulation or that granted the Quartermaster General and the Railroad Bureau chief complete autonomy over the road companies. Three capable, experienced, and talented men stepped forward to run the Railroad Bureau and each did as best as he could under the circumstances. One very talented Quartermaster General worked to ensure Confederate railroads contributed as much as possible to further the Confederate Cause. Regardless of how these men fared or the goals they reached, they operated under the yoke of government bureaucracy that stifled progress in wartime rail operations.

Each of the Confederacy's railroad chiefs worked under less than favorable conditions. With no precedent to guide him, William Ashe managed to deliver Confederate troops by rail to the first Battle of Manassas. William Wadley battled the superintendents over every issue related to the carriers while performing his job with dignity and perseverance. Frederick Sims managed to keep Confederate rails in action even as the Union army did everything in its power to destroy the rails. Until Lawton's arrival in 1863, Ashe, Wadley, and Sims each battled Quartermaster General Myers on railroad regulation, track gauge, and the creation of a law granting overall authority for the carriers to the Railroad Bureau. Shortages in iron supplies, railroad ties, and replacement parts existed, issues neither Ashe, Wadley, nor Sims could not afford to ignore.

Failure to maintain an efficient railroad system must fall on the shoulders of Jefferson Davis. While the superintendents did not always act in ways that pleased Ashe, Wadley, or Sims, it must be remembered that Virginia's road companies existed as state-owned businesses. Without regulation, the superintendents and the state, not the central

government, chose to provide full participation in the war effort. Throughout the war, until it was too late to make a difference, Davis overlooked four years of railroad-induced frustration. During those times when political necessity dictated otherwise, Davis looked the other way and balked at bringing the Confederacy's railroads under government control.¹³⁴ No piece of Confederate railroad legislation exists that bears the personal stamp of Jefferson Davis. Historian Richard Goff wrote, "most of all, Jefferson Davis prevented effective military control over the railroads throughout the war."¹³⁵ The president of a nation engaged in a civil war has countless responsibilities and cannot attend to every detail concerning his country. Jefferson Davis too often refused to listen to his railroad advisors and the result was one of failure in a long line of disappointments.

Allan Nevins wrote that, "had the Confederacy established a railway dictatorship under an autocrat ruling all the lines, he might have delivered the South from its worst transportation troubles for a short time: but he might also have created new difficulties, and such a dictatorship was impossible."¹³⁶ Together, Ashe, Wadley, and Sims brought to the Confederacy the greatest levels of railroad expertise and knowledge. Separately, their wisdom and dedication were not enough to overcome the Confederacy's railroad problems. Like General Lee, the government frustrated them, their concerns and goals often relegated by the Confederate Congress and Abraham Myers to a lesser status than they deserved.

Richmond lay in ruins in April 1865 and the condition of Confederate railroads, particularly those in Virginia where the worst fighting occurred, matched the condition of

¹³⁴*OR*, I, (LI), 852. In a letter to Secretary of War James Seddon, Davis defended his position against regulation. He was not, Davis informed Seddon, "encouraged by the past to expect that all the difficulties would be removed by transferring the management of these extensive organizations to the agents of the War Department."

the battered countryside. Everywhere, track lay twisted and burned while damaged or destroyed locomotives and rolling stock stood silent in wrecked marshalling yards. The great and violent experiment in state's rights had failed and along with it, so too had the South's railroads.

¹³⁵Goff, *Confederate Supply*, 229, 243.

¹³⁶Nevins, *The War For the Union*, vol. 4, 241.

CHAPTER III

VIRGINIA GEOGRAPHY, STATE OVERSIGHT, AND WARTIME RAILROAD SUPERINTENDENTS

No other state in the Confederacy matched the quality of Virginia's railroads at the beginning of the Civil War. By April 1865, each of Virginia's primary carriers stood on the brink of financial ruin. Primary companies such as the Virginia Central and the Southside found it difficult to pinpoint a date when their line planned to resume normal operations. Many of the smaller road companies had closed their doors forever, the victims of an economy destroyed by the war and a worthless currency. While much of the responsibility for the destruction of Virginia's railroads must go to the Union army, other factors came into play that contributed to the failure of the railroads to meet wartime needs. The Confederate Congress failed to pass legislation providing the Confederate government with the authority to regulate the railroads until it was too late in the war to make a difference. When railroad-regulating legislation arrived, the legislation proved too ineffective to make a difference. The Confederate Congress, the Quartermaster Department, and the Railroad Bureau battled throughout the war over which office had jurisdiction over the rail carriers. In a situation that required cooperation and compromise, neither the civilians nor the government worked together to find a workable solution to the Confederate rail dilemma. The result was one of little

cohesion and collaboration between the various offices that controlled the Confederacy's railroads.

During most of the Civil War, control and supervision of Virginia's railroads remained with the civilian officers who ran the companies. Attributing a level of responsibility for the Confederacy's rail problems on civilians, historian Robert C. Black wrote, "railroad owners, managers, and even employees were unwilling to make serious sacrifice of their personal interests."¹ The Civil War created a situation that neither Northern nor Southern rail superintendents had faced before. Despite the rail executive's refusal to loosen their tightfisted grip from their lines, Black cannot not sum up their wartime actions with one simple conclusion. Running a railroad during a time of civil war required serious and parsimonious levels of resource protection and material acquisition and allocation. An examination of the civilian's role in Virginia rail operations during 1861 – 1865 reveals the tough choices and decisions selected by the road company's presidents and superintendents. When called on for support by the Confederate government, too many times those who controlled the road companies behaved uncooperatively, contentiously, or blindly to the Confederacy's overall rail needs. Yet, on those occasions when the Quartermaster Department, the Railroad Bureau, or the Confederate Congress only *suggested* the road companies work together to solve the Confederate rail dilemma, many of Virginia's railroads refused to lend anything more than cursory assistance to one another. Virginia's rail supervisors, however, did not act contrary to their established, pre-war patterns. Instead, the railroad presidents and

¹Robert C. Black, *Railroads of the Confederacy* (Chapel Hill: The University of North Carolina Press, 1952), 294.

superintendents protected their lines and the property of the company's investors as best they could under wartime conditions.

This chapter examines several aspects of Virginia's railroads during the Civil War. An examination of Virginia's geography illustrates the state's need for a fast, heavy-hauling delivery system. Before the 1850s, Virginians relied on turnpikes, canals, and steamboats to deliver goods to their communities. With the coming of the railroads, these methods of transporting goods diminished in value and Virginians accepted the iron horse as the primary means of improving business, stimulating local economies, and reducing travel time from one region to another. To assist in the transition from water- and turnpike travel, in 1816 the Virginia General Assembly created the Board of Public Works (BPW) to oversee the state's internal improvement programs. Designed to provide funds to promote the founding of railroads throughout Virginia, by the beginning of the Civil War, the BPW owned the majority of stocks in many of the state's railroads. This chapter discusses the relationship between the BPW and Virginia's railroads as the United States edged closer to civil war. Also included in this chapter is an examination of the availability of iron during the Civil War. Between 1861 – 1865, Virginia's railroads suffered from a want of iron. When Tredegar Iron Works ceased filling orders for iron from Virginia's road companies early in the war, the railroads found performing their jobs and contributing to the war effort difficult, if not altogether impossible. The task of managing the railroads under increasingly trying conditions fell upon the superintendents and company presidents. This chapter examines the privileged backgrounds many of Virginia's carrier superintendents came from as well as their ability to keep their lines operational during a period of war. A discussion on railroad labor,

including whites and Negroes, illustrates the carrier's attempts to maintain adequate supplies of labor during periods characterized by conscription and material shortages.

Before examining the actions of Virginia's railroads during the Civil War, it is important to examine the conditions each line faced as the North and the South neared the beginning of hostilities. The most critical period in Virginia railroad history began in 1850 and ended in 1860. During that ten-year period, Virginia's railroads overcame canals, turnpikes, and steamboats as the primary source of transportation in the state. Beginning in 1850, Virginia's railroads enjoyed a period of expansion and financial growth. Track mileage increased each year in the decade preceding the Civil War. Trains shipped cargo faster and cheaper than barges on canals, wagons on turnpikes, or riverboats plying the main river avenues such as the James, Rappahannock, or the York River. Throughout the Old Dominion, regional and district planners eyed the local geography with great scrutiny to determine the best location to either expand an existing railroad or, where favorable conditions existed, to create a new rail line.

Virginia's geography presented several challenges to railroad planners. Covering an area of approximately sixty-seven thousand square miles and with a population exceeding one and a half million people, Virginia ranked as the most populous state in the Confederacy.² Historian Douglas Southall Freeman wrote, "prior to the mad spring of 1861, whenever Virginians had occasion to mention the geography of their state, it had been to boast of wide streams, to extol blue mountains, or to praise valleys of

²Douglas Southall Freeman, *Lee's Lieutenants* (New York: Charles Scribner's Sons, 1942), 677. Only Texas and Missouri covered a greater geographical area. Virginia's 1860 population total included more than 500,000 slaves. The majority of Virginia's population resided in the Alexandria – Richmond – Norfolk triangle.

abundance.”³ Stretching from the Atlantic Ocean to the Ohio River, Virginia shared boundaries with seven states and the District of Columbia.⁴ In the northwest, the Ohio River and the Potomac River provided Virginians with deep-water routes that enhanced inland trade and allowed for greater levels of migration to the west. Located in what was mid-Virginia in 1860, the forty-mile wide Shenandoah Valley represented the state’s most important staple crop producing area. In the east, the James River, the Rappahannock River, and the York River served the major cities such of Richmond, Lynchburg, and Fredericksburg. On the Atlantic coast, the deep harbor ports of Norfolk and Hampton Roads allowed for the importation of goods from every country in the world as well as for the export of Virginia tobacco and other cash crops.

Each of Virginia’s regions, however, had one common characteristic. Virginia’s surface roads carried the reputation of being the worst in the South. Freeman described Virginia’s roads as “a joke when at their best and a calamity when at their worst.”⁵ Poorly mapped and frequently turning to mud after rains or to frozen and slippery surfaces in winter, few of Virginia’s roads lead to any particular destination.⁶ Because the surface road situation in Virginia presented too many unknowns, each of Virginia’s regions interpreted its railroad needs differently and, consequently, placed varying levels of importance on the role of the rail carriers located in their areas. As the number of

³Freeman, 677. Although decidedly pro-Southern, Freeman’s *Lee Lieutenants* offers a thorough discussion of Virginia’s geography. Although his observations primarily describe the military-related significance of the state’s geography at the beginning of the Civil War, Freeman’s comments also provide clear insight into how each of the state’s diverse regions relied on rail transportation to satisfy future and sectional needs; Kenneth William Noe, “Southwest Virginia, the Virginia and Tennessee Railroad, and the Union, 1861 – 1865” (Ph. D. diss., The University of Illinois at Urbana-Champaign, 1990), 4. Noe wrote that to understand Antebellum Virginia, one had to begin by understanding the state’s geography.

⁴In 1860, Virginia shared boundaries with two northern states, Ohio and Pennsylvania; two southern states, North Carolina and Tennessee; and the three border states, Maryland, Kentucky, and Delaware.

⁵Freeman, *Lee’s Lieutenants*, 677.

track miles increased, however, and it became more evident to Virginians what the locomotive and flat cars could do, the people of each region realized the importance of being connected geographically and economically by the railroad.

Before the railroad became a major force in the state, Virginians used a variety of transportation methods for people and goods. Passengers and freight shippers used turnpikes, canals, and rivers as the primary modes of transportation throughout the state. Historian Albrow Martin reported that by 1808, Virginia saw an increase in the number of turnpike miles, a trend that continued until the mid-1840s.⁷ The best known of Virginia's turnpikes, the Valley Pike, ran north to south between Staunton and Winchester, a distance of approximately ninety miles.⁸ To the north, the National Road stretched from Cumberland, Maryland, to Wheeling, Virginia, and allowed travelers to decrease the travel time between the two cities from eight days to three.⁹ By 1850, however, turnpikes proved less cost-effective than originally hoped by their designers. As Martin pointed out, turnpikes made travel easier but not cheaper. Maintenance and labor costs cut too deeply into the funds collected at the turnpike's toll stations. Teamsters raised their transportation costs, causing merchants to spend more when sending their goods to various towns located along the pike's route.¹⁰ Travelers and merchants continued to use the Valley Pike during the Civil War but its remote location and limited distance allowed

⁶ Angus Johnston, "Virginia Railroads in 1861," *The Journal of Southern History* 23 (August 1957): 307 – 330. Johnston wrote that rumors persisted in Virginia that only local residents knew the exact course of many of the roads and that the routes were often a cruel joke played on unsuspecting travelers.

⁷ Albrow Martin, *Railroads Triumphant: The Growth, Rejection, and Rebirth of a Vital American Force* (New York: Oxford University Press, 1992), 8.

⁸ Martin, *Railroads Triumphant*, 8; James D. Dilts, *The Great Road: The Building of the Baltimore and Ohio, the Nation's First Railroad, 1828-1853* (Stanford: Stanford University Press, 1993), 152. The Valley Pike was a technological marvel for its time. It had no more than a five percent grade per mile and included deep ditches on both sides of the road to facilitate drainage.

⁹ Dilts, *Great Road*, 283.

for use by only a small percentage of Virginia's farmers and merchants. By 1850, Virginians in all regions of the state increased their dependence on goods and crops produced in the Shenandoah Valley. Farmers in the Valley sought another mode of transportation to better serve their needs, the railroad. Without the railroads, the Shenandoah Valley and the western counties faced the possibility of becoming a backwater region of remote farms and isolated small towns. Without some major transportation source, major Shenandoah Valley cities such as Staunton and Winchester faced severe revenue losses by not exporting or importing goods in and out of the Valley.¹¹

During the Antebellum period, Virginians enjoyed an abundance of deep rivers, particularly in the Tidewater and fall line regions east of the Blue Ridge Mountains. Large steamboats carried tons of cargo and large numbers of passengers on principal rivers such as the James, the York, and the Rappahannock. Compared to turnpikes, steamboat operators worried less about cost and distance factors when transporting goods or passengers.¹² Steamboat companies built warehouses, docks, and boat repair facilities in Richmond, Norfolk, and Hampton Roads, a move that increased the economic value of those cities. While steamboats offered a viable alternative to turnpikes, riverboat operators paid high insurance rates and cargoes and passengers were too frequently lost

¹⁰Martin, *Railroads Triumphant*, 8. Martin wrote that the cost of road haulage exceeded by several times the market value of commodities [such as salted pork, wheat, corn, and cattle] at eastern commercial centers.

¹¹Staunton and Winchester sat at opposite ends of the Valley Pike and represented the prime agricultural and population centers of the mid-Valley region. Each of these cities depended a great deal on one or more of Virginia's principal railroads for its livelihood and sense of financial well-being. The Manassas Gap Railroad, along with the Baltimore and Ohio, provided service to Winchester and the northern reaches of the Shenandoah Valley. The Virginia Central Railroad crossed the Blue Ridge Mountains and entered the Valley at Rockfish Gap and provided important communications and shipping advantages to Staunton and Harrisonburg. Today, each of these communities continue to receive benefits brought to a city by a railroad.

to fires caused by exploding engines.¹³ Steamboats, however, did not travel to as many inland areas as railroads, and so, river transport fell victim to its own technological limitations. By 1860, a growing number of tobacco growers in eastern Virginia, for example, relied less on steamboats and more on railroads to get their crop to market.¹⁴ Railroads such as the Orange and Alexandria, the Seaboard & Roanoke, and the Norfolk & Petersburg became the preferred means of transportation for passengers and goods in the Tidewater region.

Virginians also had their canals. Virginia possessed two canals of economic importance. The Chesapeake & Ohio Canal harnessed the power of the Potomac River. With the canal's eastern terminus located in Washington, the C&O dipped south and west of the Potomac, and stretched as far west as Cumberland, Maryland, after plunging in and out of northern Virginia. The James River & Kanawha Canal ran across southern Virginia from Richmond to Lynchburg and assisted farmers and plantation owners in delivering tobacco and crops to western and eastern Virginia. Historian James Dilts wrote the success of the Erie Canal proved that man-made waterways "could carry materials thirty times more cheaply than [surface] roads and therefore opened up more remote parts of the country to cultivation."¹⁵ In the long run, however, canals, like turnpikes and river transports, proved costlier than railroads and canal construction declined, ceasing altogether in the mid-1850s.¹⁶ Because canal-building costs continued

¹²Martin, *Railroads Triumphant*, 9.

¹³Martin, *Railroads Triumphant*, 10. While steamboats suffered adverse weather better than wagon trains, they faced whenever the waters of the Chesapeake Bay or any of Virginia's major rivers froze or experienced choppy waters.

¹⁴Charles W. Turner, "Railroad Service to Virginia Farmers, 1828-1860," *Agricultural History* 22 (October 1948): 239-248.

¹⁵Dilts, *Great Road*, 21.

¹⁶James Kip Finch, *Engineering and Western Civilization* (New York: McGraw Hill Book Company, 1951), 72.

to rise, the C&O Canal never reached completion and Virginians realized they could not remain financially linked to what appeared to them a losing proposition.¹⁷ The railroad proved a mighty opponent. According to Albro Martin, “Men had begun to experiment with the application of steam to land vehicles, and sooner or later the light was to dawn effulgent: a steam-powered land vehicle did not have to run on a conventional road but, in fact, would do much better. . . if run on rails. The railroad age was ready to begin.”¹⁸

The age of iron rails and steam or coal-powered engines arrived in Virginia but it did not come without its detractors. Historian Robert Fogel pointed out that although track mileage increased in the ten-year period from 1850 – 1860, many Virginians remained doubtful of the railroad’s future. Fogel wrote, “extreme skeptics argued that railroads were too crude to ensure regular service.”¹⁹ The railroad’s critics silenced their protests when “far-sighted innovators declared that the iron horse had superseded the waterway in inland transportation and proposed vast projects for covering the state with railroads.”²⁰ Consequently, the importance of canals, turnpikes, and to a lesser extent, river transportation, diminished in Virginia.²¹ Railroads proved more dependable, faster, and better equipped to haul greater loads over longer distances at cheaper rates.

By 1860, Virginia led the South in track mileage. More than 1,500 miles of track stretched across the state as a greater numbers of passengers and large volumes of cotton,

¹⁷ Albert Fishlow, *American Railroads and the Transformation of the Antebellum Economy* (Cambridge: Harvard University Press, 1965), 64; Eugene Alvarez, *Travel On Southern Antebellum Railroads, 1828-1860* (University, Alabama: The University of Alabama Press, 1974), 4; Martin, *Railroads Triumphant*, 40.

¹⁸ Martin, *Railroads Triumphant*, 40

¹⁹ Robert W. Fogel, *Railroads and American Growth: Essays in Econometric History* (Baltimore: Johns Hopkins Press, 1962), 2.

²⁰ Ibid.

²¹ River transportation flourished despite experiencing some loss of business to the railroads. As the number of track miles increased and shortened the travel time to other non-Virginia ports such as New Orleans, Vicksburg, Memphis, and Louisville, passengers and freight shippers continued to use steamboats

tobacco, and staple crops moved across the Virginia landscape. Once investors and the public accepted the practicality of steam locomotion, Virginians stepped up their use of railroads and the various road companies in the state competed for business.²² To entice customers, the carriers created a variety of cars and locomotives capable of making a journey by rail more comfortable for passengers and more economical for shippers.

For passengers and goods producers alike, locomotive size and speed mattered more than anything else. Passengers hoped to travel from one location to another in the shortest time possible. Producers wanted their products delivered to population centers in the shortest time possible. By 1860, trains averaged sixty miles per hour although most lines operated their engines at the slower and safer speed of twenty miles per hour.²³ At an average cost of eight thousand dollars per engine and weighing between three and five tons each, locomotives were relatively small and underpowered by today's standards.²⁴ Until 1850, several Virginia railroads such as the Manassas Gap Railroad, the Orange & Alexandria Railroad, and the Virginia Central Railroad imported locomotives from England.²⁵ By 1858, most railroads in Virginia purchased rolling stock and engines from domestic manufacturers. *The American Railroad Journal* informed readers that "the newly emerging industrial might allowed the United States to no longer import but rather to export the machines to Cuba, Canada, and Europe. America is distinguished for the superiority of her engines."²⁶ Critics of the railroads or the engine's performance again spoke out. Traveling through Virginia in 1852, Frederick Law Olmsted grew dismayed

as modes of inland transport. Steamboat owners, therefore, continued to offer a valuable service, but were forced to operate at cheaper rates than the railroads.

²² Alvarez, *Antebellum Railroads*, 150.

²³ Alvarez, *Antebellum Railroads*, 34.

²⁴ Ibid.

²⁵ Ibid.

²⁶ *American Railroad Journal*, 31 (May 1858), 325.

with the slow pace of rail transport. After traveling no more than twenty miles in ninety minutes, Olmsted questioned why one Virginia newspaper advertised his train as *fast*.²⁷ Despite Olmsted's criticisms, Virginia's railroads expanded and improved service to their customers. Just as locomotives improved in quality and power, so too did passenger and freight cars.

Early passenger cars on Virginia's railroads were no more than horse-drawn carriages placed atop a set of four iron wheels. In 1855, road companies in Virginia attended more to passenger comfort than before. Passenger cars resembled long, brightly-colored wooden boxes with doors at both ends and windows along each side. Approximately forty to sixty passengers filled each car.²⁸ Travel time between stations decreased as locomotives grew larger and faster. The Orange & Alexandria claimed to have the fastest locomotives in Virginia, the result of its engineers exceeding by ten miles or more the recommended safe speed of twenty to thirty miles per hour.²⁹ As the 1850s drew to a close, Virginia's railroads entered a period where they represented the standard for all Southern lines.

Just as passenger service improved, so too did the road company's ability to ship freight. Frequently known as "house cars," boxcars and flatcars carried goods of every description from Richmond, Norfolk, and other major cities, to other deep-water ports

²⁷Olmsted, Frederick Law, *The Cotton Kingdom: A Traveller's Observations on Cotton and Slavery in the American Slave States* (New York: Alfred A. Knopf, 1953), 44.

²⁸Alvarez, *Antebellum Railroads*, 48; Anthony J. Bianculli, *Trains and Technology: The American Railroad in the Nineteenth Century, Volume Two: Cars* (Newark: The University of Delaware Press, 2002), 24. Passenger cars featured canvas-topped roofs that were pulled back during warm weather to improve ventilation. Additionally, many passenger cars on Virginia's railroads had carpeted floors, cushioned seats, and stoves to fight winter cold; Black, *Railroads*, 19. Black wrote that despite improvements in passenger comfort, riders often rode in dimly lit, smoke filled compartments, the cinders and sparks from the engine's smokestack entering through the windows; Johnston, "Virginia Railroads," 323. Sleeping cars were not required because most Virginia railroads operated only during daylight hours.

²⁹Johnston, "Virginia Railroads," 323.

located along the United States' east coast.³⁰ By 1856, every boxcar owned by the Virginia Central, the Seaboard & Roanoke, and the Baltimore & Ohio weighed an average of nine tons while riding perched on two four-wheeled trucks capable of carrying increasingly heavier loads.³¹ Improved freight hauling provided Virginia growers with the ability to ship their products cheaper and faster to waiting markets. Conversely, Virginia markets improved their ability to provide and obtain a greater variety of goods for their customers because of the railroad's enhanced ability to move larger volumes of freight from region to region within the state.

Virginia's railroads did have their problems despite developing into the best rail system in the South. Fares and schedules did not keep pace with the internal improvements found in most of the road companies and passenger fares and freight charges were the highest of all southern states. The discrepancy in fares stemmed from individual carriers refusing to allow its rolling stock or engines to pass from their company to another even when direct physical connections existed between the different organizations. Black pointed out that "freight moving over several carriers might have to be unloaded and reloaded three or four times."³² The problem eased by 1861, but only by small degrees. In its 1861 annual report, the Virginia Central reported that it had permitted the passage on its rails the rolling stock and engines of the Orange & Alexandria between Gordonsville and Lynchburg.³³ Primitive rate structures and stiff tariffs created great gaps of differentiation between road companies.³⁴ The Virginia

³⁰ Alvarez, *Antebellum Railroads*, 15. These included ports such as Baltimore, Charleston, and Boston.

³¹ Bianculli, *Trains and Technology*, 116; Alvarez, *Antebellum Railroads*, 51.

³² Black, *Railroads*, 37.

³³ *Annual Report*, 1861, Virginia Central Railroad, 26; Black, *Railroads*, 38. Under a cooperative track agreement, the Petersburg and the Seaboard & Roanoke Railroads operated their equipment on tracks belonging to North Carolina's Wilmington & Weldon line.

³⁴ Black, *Railroads*, 38.

Central charged goods shippers thirty-eight cents per one hundred pounds of transported goods, the highest in the South.³⁵ Passenger fares on the Virginia Central were reasonable by Virginia standards: First class passengers paid 4.1 cents per mile while second class riders paid three cents for the same distance.³⁶ Passenger rates and freight hauling charges remained at these levels until shortly after the beginning of the Civil War when they rose sharply due to wartime inflation.

More than high transportation and ticket prices plagued Virginia's railroads before the Civil War. Keeping schedules remained a problem for conductors and engine operators. Eugene Alvarez discovered that scheduling presented "one of the most confusing aspects of railroad transportation. Some passengers were ignorant of the importance of schedules and failed to understand why locomotive captains could not delay a departure long enough for passengers to visit local taverns."³⁷ The main culprit in the lack of uniform schedule pointed to the absence of a standard time system in the United States. Before the adoption of accepted regional time zones, conductors set their watches by a variety of sources ranging from depot and town clocks to the engineer or conductor's personal timepiece.³⁸ The lack of a standard time table prevented the prompt arrival of trains while simultaneously raising the number of complaints from passengers and goods shippers. Railroads in the South experienced scheduling problems until well after the Civil War.

³⁵ *Annual Report*, 1861, Virginia Central Railroad, 35; Johnston, "Virginia Railroads," 324.

³⁶ Johnston, "Virginia Railroads," 324; Noe, "Southwest Virginia," 27. Passengers on the Seaboard & Roanoke paid the highest fares in the South. Regardless of the distance they traveled, all riders on the S&R paid five cents per mile.

³⁷ Alvarez, *Antebellum Railroads*, 120.

³⁸ Black, *Railroads*, 32. Black noted that each railroad regulated its operations in accordance with a single, company-designated clock, set to conform with the local mean solar time of a particular town or village. The company clock of the Richmond & York Railroad, for example, was "based upon the vagaries of the 'Regulator at Mitchell and Tyler' in Richmond;" Alvarez, *Antebellum Railroads*, 120.

Increases in track mileage affected Virginia's commerce. Before the 1850s, farmers and planters experienced delays in getting their goods to market. As the railroads increased the length of their lines, more depots appeared which provided a greater number of shipping points for farmers and manufacturers. The Board of Public Works worked with agrarians, businessmen, and merchants to ensure that Virginia residents moved their crops and finished goods quickly to waiting markets.

Virginia's legislature established the Board of Public Works (BPW) on February 5, 1816. The BPW's panel included the Governor as president *ex officio*, the State Treasurer, the Attorney General, a Principal Engineer, and "ten citizens to be selected, three from west of the Alleghenies, two from the [Shenandoah] Valley, three from the Piedmont, and two from the Tidewater."³⁹ Instructed by the General Assembly to examine all proposals submitted to the state for public funding, the BPW sent annual reports to the Principal Engineer outlining surveys, plans, and estimated costs of internal improvements.⁴⁰ The General Assembly, however, did not authorize the BPW to carry out a master plan for creating a unified rail network in Virginia. Instead, as political scientist Carter Goodrich pointed out, the BPW possessed the "more limited function of advising the legislature on the claims and merits of competing projects, or providing through its Principal Engineer the critically scarce factor of technological competence."⁴¹ The BPW set out to solidify its relationship with Virginia's railroads by purchasing no more than forty percent of the individual carrier's stock after private investors bought

³⁹Carter Goodrich, "The Virginia System of Mixed Enterprise," *Political Science Quarterly* 3 (September 1949), 355-387.

⁴⁰Goodrich, "Mixed Enterprise," 361; Johnston, "Virginia Railroads," 316. The Virginia legislature confined the BPW to surveillance powers only, to uphold financial and engineering standards, and to encourage private enterprise in the interests of Virginia's economic development.

⁴¹Goodrich, "Mixed Enterprise," 361; Noe, "Southwest Virginia," 59.

sixty percent of the original road company stock.⁴² The practice of buying only forty percent of a carrier's stock changed when the BPW realized the benefit of owning the majority of a carrier's shares.⁴³ By 1851, the BPW retained nearly half of the sixteen million dollars invested in railroads in the state.⁴⁴ Virginia statutes encouraged state-appointed board members to refrain from using their numerical advantage to determine policy for the carrier.⁴⁵ Creating the BPW proved a smart decision by the Virginia legislature. State-appointed directors, however, could not help but benefit from their numerical advantage on any particular railroad's board of directors. Because private investors often failed to come up with the capital needed to found, organize, and equip a railroad, turnpike, or canal, the BPW supplied the funds needed to begin and complete these types of projects. The possibility of privately-funded monopolies evaporated because the state-run BPW owned the majority of a carrier's stock.

Nonetheless, the BPW had its problems. Several issues challenged the Board's ability to maintain a guiding hand in Virginia's internal improvement programs and railway operations. After 1840, the once popular turnpikes and canals felt the competitive pressure of the railroads when the BPW turned a greater share of its attention to the road companies. As a matter of necessity, BPW directors appeared before the General Assembly to seek funds for risky rail projects. Throughout the state, different

⁴²George Rogers Taylor, *The Transportation Revolution, 1815-1860* (New York: Rhinehart & Company, 1951), 93. The BPW also used state funds to improve canals, turnpikes, and river ports; Johnston, "Virginia's Railroads," 316.

⁴³John F. Stover, *The Railroads of the South, 1865 - 1900: A Study in Finance and Control* (Chapel Hill: The University of North Carolina Press, 1955), 29.

⁴⁴Stover, *Railroads of the South*, 29; Taylor, *The Transportation Revolution*, 39. Taylor wrote "once the railway age began, the state readily adopted the practice of subscribing to three-fifths of the state shares. Thus ownership of sixty percent of the railroad entitled the state to appoint three of the customary five directors."

⁴⁵*Ibid.* No state law existed that required BPW members to abstain from using numerical advantage when deciding road company policy.

track gauges and a chronic lack of connections between major carriers plagued the BPW until after the Civil War. The lack of connections affected commerce and prevented or slowed the transfer of goods from one region of Virginia to another. Infighting between the various road companies, characterized by suspicion and an intense spirit of localism, often tied up the courts as one carrier sued another over whether or not state law permitted the laying of track through commercial districts.⁴⁶

In its 1847 annual report, the Board of Public Works reported declining profits from turnpikes and canals.⁴⁷ When the Board's directors elected to divert more funds toward railroads than the amount it previously spent on turnpike or canal improvements, the BPW and the state entered a troubling time. In 1850, for example, the state received less than two percent of its investment in annual dividends from the road companies.⁴⁸ The BPW realized the uncertain situation created by providing the railroads with a majority of their funding. To back away from providing the carriers with financial assistance cost the state more than if the treasury spent the same funds keeping the carriers in operation. The state lost its forty to sixty percent investments in the railroads if the BPW severed its relations with the carriers. In 1859 Virginia faced having to redirect funds from projects designated for surface road repair and levees to the railroads in order to keep the carriers in business. Accordingly, the value of the BPW's investment in the carriers in 1860 totaled \$14.6 million in common railroad stock, \$1.29 million in preferred road company stock, and \$3.9 million in various loans, bonds, and guarantees

⁴⁶Virginia Board of Public Works, *Annual Report of the Board of Public Works*, 31, (1847), xxxiv.

⁴⁷*Annual Report of the Board of Public Works*, 31, (1847), xxxiv; John Majewski, "The Political Impact of Great Commercial Cities: State Investment in Antebellum Pennsylvania and Virginia," *Journal of Interdisciplinary History* 28 (Summer 1997): 1-26. Majewski disputes the BPW's 1847 report and wrote that the state continued to supply liberal amounts of funds to turnpike and river improvement projects even when those projects competed with railroad funding. By 1847, turnpike and canal construction and maintenance costs were higher than the revenues returning from either of those sources.

for a total of approximately \$19 million.⁴⁹ As historian John Majewski pointed out, "On paper, the Board was a powerful organization that not only distributed state investment to individual [road companies] but also appointed state proxies and directors as a clearinghouse of engineering reform."⁵⁰ Majewski also noted that although state investments helped to centralize and rationalize Virginia's transportation system, the underlying and unforeseen problem of accentuating the worse aspects of local farming appeared too often.⁵¹ Small towns, particularly those in western Virginia's mountainous regions, realized their remote locations too often precluded them from enjoying the benefits of a railroad.⁵² Fighting for their financial future, Majewski explained, "The legislative battles became so acrimonious that jilted cities sometimes threatened to leave the state if funding was not forthcoming."⁵³ To appease these small, isolated mountain hamlets, the state legislature offered land grants to holding companies, which reissued the grants to the railroads. Although land grants proved a novel way to fund the carriers, as historian Robert Angevine noted, the nature of the awards remained local in focus. Except for the state-funded Virginia and Tennessee Railroad located in southwestern Virginia, in 1856 the General Assembly awarded more land grants to eastern and central Virginia road companies than the number of lines in western and southwestern Virginia received.⁵⁴ The Board of Public works continued this trend until after the Civil War. According to Robert Black, however, although certain Virginia regions received less

⁴⁸ Majewski, "Political Impact," 18.

⁴⁹ John Majewski, "Who Financed the Transportation Revolution? Regional Divergence and Internal Improvements in Antebellum Pennsylvania and Virginia," *The Journal of Economic History* 56 (December 1996): 763-788.

⁵⁰ Majewski, "Political Impact," 778.

⁵¹ Ibid.

⁵² Noe, "Southwest Virginia," 61.

⁵³ Majewski, "Who Financed," 780-781.

funding from the state than other areas, "the happy partnership of steam and government achieved its highest development in Virginia. The Board of Public works watched the financial condition of each carrier. Railroading was no free enterprise in Virginia."⁵⁵

While the Board of Public Works oversaw the carriers it also granted the road companies too much freedom in other areas. As early as 1851, the BPW realized the benefits of having a coordinated rail system in Virginia, but such a system never materialized. Most of Virginia's carriers existed as part of a network of small local lines connecting plantation districts to regional marketing depots.⁵⁶ The primary cause behind the lack of a statewide, connected rail system lay in the absence of a standard track gauge and not enough physical connections between road companies. The BPW never established a standard track gauge in Virginia and the resulting gaps caused delays in goods reaching their destinations. Businesses suffered financial losses when the carriers refused to guarantee the arrival of goods within a specified timeframe. The Virginia Central, the Orange & Alexandria, and the Richmond, Fredericksburg & Potomac, the state's largest and longest railroads, respectively, operated on the more narrow, four-foot eight-inch track gauge. The Virginia & Tennessee ran on the wider, five-foot gauge yet possessed no physical connection with the three carriers that covered the most populated and more commercial areas of Virginia.⁵⁷ An advantage existed, however, to having multiple track gauges in Virginia. As historian William Phillips pointed out, in the three

⁵⁴Robert G. Angevine, "The Railroad and the State: War, Business, and Politics in the United States to 1861" (Ph. D. diss., Duke University, 1999), 203, 209; Noe, "Southwest Virginia," 161.

⁵⁵Black, *Railroads*, 42.

⁵⁶Goodrich, "Mixed Enterprise," 377; Majewski, "Who Financed," 780.

⁵⁷Majewski, "Political Impact," 23-24. The Virginia and Tennessee and the Orange & Alexandria linked in Lynchburg. Because the O&A ran on the narrow gauge track and the Virginia and Tennessee operated on the wider gauge rails, Lynchburg served as a large transshipment point that "scarcely blunted the effectiveness of this main route." Virginia and Tennessee company officers believed, erroneously, that the wider five-foot gauge provided a technological advantage over all other railroads in Virginia.

years before 1860, the varying gauges prompted engineers and road company officers to railroad engineers and road company officials "to think about solutions to new problems or to think about old problems in new ways."⁵⁸ By 1860, more powerful and fuel-efficient locomotives pulled rolling stock across Virginia's rails. Designers also widened and lengthened the cars most important to passengers. Dining cars, smoking cars, and sleeping cars made their debut shortly before the Civil War.

In addition to BPW oversight, the managers of Virginia's railroads held the responsibility to run their lines for the benefit of the stockholders. The men who supervised Virginia's railroads offered a great deal to their respective companies. Many of them shared backgrounds of privilege and relations with earlier Virginians of distinction such as Thomas Jefferson, James Madison, and Supreme Court Chief Justice John Marshall. Despite their gloried pedigrees and the important role they played in managing Virginia's road companies, precious little information exists from which contemporary writers and historians can analyze and draw conclusions. Historian Angus Johnston wrote that at the beginning of the Civil War, the men responsible for operation of Virginia's railroads were "by far the most difficult element to assess because so little is known about them."⁵⁹ Robert Black explained that "except for a few outstanding figures...the human side of Confederate railroading at the outbreak of the War Between the States is difficult to reconstruct. For the day of the Confederacy was a period when railroad companies frequently chose not to publish information regarding their officers and employees. Surviving statistics deal more often with the specifications of

⁵⁸William Phillips, "Patent Growth in the Old Dominion: The Impact of Railroad Integration before 1880," *The Journal of Economic History* 52 (June 1992): 389-400.

⁵⁹Johnston, "Virginia Railroads," 326; Angus J. Johnston, "Disloyalty on Confederate Railroads in Virginia," *Virginia Magazine of History and Biography* 63 (October 1955): 410-426.

locomotives than with the personalities of the shadowy men who ran them.”⁶⁰ Numerous accounts from Virginia’s Board of Public Works survived the war and are available in Virginia’s state library, but “only the barest minimum of facts about a handful of [railroad] men have come to light. It is no coincidence that this small group is composed of presidents and superintendents, the two highest paid and most publicized positions of the time.”⁶¹ Virginia Central president and superintendent, Edmund Fontaine and Henry D. Whitcomb, respectively, earned approximately \$3,000 each per year as that company’s highest paid officers at a time when Virginia Governor John Letcher earned \$4,000 per annum.⁶² Because they received the highest pay at their road companies, rail superintendents and presidents grew accustomed to getting what they wanted.

Angus Johnston described the relationship among Virginia’s railroad managers as characterized by “local jealousies” that interfered with each line’s ability to deliver cargo and passengers efficiently.⁶³ Johnston wrote, “the railroad companies eyed each other with suspicion and to entrust their rolling stock to one another with the greatest reluctance.”⁶⁴ Individual road companies “acted as though they were completely independent. They were extremely sensitive to parental (governmental) interference and neither Virginia nor the Confederacy can escape criticism for continuing to act the role of doting parents of a group of selfish offspring often badly in need of coercion and compulsion, especially during the crucial war years.”⁶⁵

⁶⁰Black, *Railroads*, 27-28.

⁶¹Johnston, “Virginia Railroads,” 326; Johnston, “Disloyalty on Confederate Railroads,” 415.

⁶²*Annual Report*, The Virginia Central Railroad, 1861: 178; *Acts of the General Assembly of the State of Virginia*, 1861: 8.

⁶³Johnston, “Virginia Railroads,” 314.

⁶⁴*Ibid.*

⁶⁵Johnston, “Virginia Railroads,” 315. Johnston blames Jefferson Davis and southern politicians for failing to exercise the powers of government and failing to force the railroads to provide greater levels of support for the Confederate war effort. Johnston wrote that the government’s failure to extend legislative control

To understand Virginia's railroad superintendents and presidents and their wartime actions, it is necessary to examine their lives before 1861. With the exception of William Mahone, many of Virginia's rail executives came from privileged backgrounds. Orange & Alexandria president John S. Barbour, who stood more than six feet tall with gray hair, claimed as not so distant relatives a former Governor and member of the United States Supreme Court.⁶⁶ Barbour served four terms in the Virginia House of Delegates and by 1861 was in his tenth year as president of the Orange & Alexandria.⁶⁷ Edward C. Marshall, grandson of Supreme Court Chief Justice John Marshall served as president of the Manassas Gap Railroad throughout the war. Edmund Fontaine of the Virginia Central possessed deep roots in American colonial history.⁶⁸ Majewski described Fontaine as a "conservative Democrat who...stood solidly behind the Confederacy during the Civil War while profoundly mistrusting northerners."⁶⁹ Seaboard & Roanoke president John M. Robinson was the son of Moncure Robinson, one of Richmond's wealthiest businessmen before the war. Black believed that if not for the father's success, the son "would not have [enjoyed] the carte blanche he held in Richmond drawing rooms."⁷⁰ In contrast to the blue-blooded Barbour, Fontaine, and Marshall, the self-made William Mahone came from more modest beginnings. Described by Black as having "plain ancestry, his abilities were found, before the end of a fabulous

over the road companies contributed to particularism and "the defeat of the Southern Cause;" Virginia Board of Public Works, *Annual Reports*, 1861: 131.

⁶⁶*Dictionary of American Biography*, Volume I (New York, 1928-1937), 592-593.

⁶⁷Black, *Railroads*, 26.

⁶⁸Johnston, "Virginia Railroads," 327; Charles W. Turner, "The Louisa Railroad, 1836-1850" *North Carolina Historical Review* 24 (January 1947): 35-51: 39; Charles W. Turner, "The Virginia Central Railroad at War, 1861-1865," *The Journal of Southern History* 4 (November 1946): 510-533: 512. Turner credited Fontaine with running the Virginia Central "with great skill."

⁶⁹Majewski, "Who Financed," 783.

⁷⁰Black, *Railroads*, 27; Johnston, "Virginia Railroads," 328. Johnston explained that John Robinson "devoted his energies to making [the Seaboard & Roanoke] virtually independent of Northern products in

career, to embrace not merely railroading, but military and political leadership [abilities] as well.”⁷¹ Mahone left the Seaboard & Roanoke to serve in the Confederate army, rising to the rank of Major General in command of the Virginia’s Sixth Volunteer Infantry Regiment.

While many of Virginia’s rail presidents came from wealthy families, others came from more humble backgrounds. Henry D. Bird of the Southside Railroad, Samuel Ruth, superintendent of the Richmond, Fredericksburg & Potomac, and Henry D. Whitcomb of the Virginia Central Railroad each came to Virginia from the North to make their fortune in the service of Southern road companies.

The oldest of the three northern-born superintendents, Henry D. Whitcomb grew up in Pennsylvania. Bird’s tenure with Virginia railroads began in 1831 when the Petersburg Railroad hired him as that line’s first civil engineer. By 1855, Bird performed the duties of superintendent of the Southside line.⁷² Also born in Pennsylvania, Samuel Ruth moved to Virginia near his twenty-first birthday in 1840. Angus Johnston described Ruth as a “modestly prosperous citizen devoted to his vocation.”⁷³ Very little is known about Henry D. Whitcomb’s life before the Civil War. Johnston wrote “Whitcomb served [the Virginia Central] for many years before and during the war and continued to

1861, entered Confederate service, and was sent to England in 1863 to make purchases for the government and the railroads.” See chapter 2 of this examination of Virginia’s railroads.

⁷¹Black, *Railroads*, 27; *Dictionary of American Biography*, XII, 211-212. After the war, Mahone created a plan to expand Virginia’s railways. Today, throughout Virginia, the Norfolk & Western, once known as the Norfolk & Petersburg, carries thousands of tons of goods from the sea ports of Norfolk and Portsmouth to markets spread across Virginia.

⁷²Charles W. Turner, “Early Virginia Railroad Entrepreneurs and Personnel,” *Virginia Magazine of History and Biography* 58 (July 1950): 323-341: 328. Bird left the Petersburg Railroad under less than honorable conditions when, in 1855, it was discovered that he misappropriated more than \$31,000 from the railroad’s general fund.

⁷³Johnston, “Virginia Railroads,” 328.

do so until 1873.”⁷⁴ Whitcomb was not a man to back down from a fight. Early in the war, Confederate General Joseph Johnston believed civilian road company officers possessed more independence than they deserved. Johnston asked Jefferson Davis to remove the northern-born Whitcomb and to replace him with Colonel Robert L. Owen, a past president of the Virginia and Tennessee Railroad. Realizing the problems associated with removing the company superintendent during a time of war, Davis rejected Johnston’s request and Whitcomb remained at his post.⁷⁵ Johnston’s run in with Whitcomb served as the first but not the last occurrence of ill feelings between Confederate military officers and civilian railroad superintendents.

A commitment to Virginia and its railroads ran deep through the men who supervised the carriers. Each man shared a love for trains and an appreciation for the smooth operation of a major organization. In 1861, Virginia’s rail superintendents and presidents knew the Confederacy needed their considerable talents and they waited to serve the new government. Rail superintendents, however, understood the importance of holding on to resources that quickly became scarce once the firing began. The Civil War presented both headaches and opportunities for the carrier executives. Where some presidents and superintendents weathered the storm well and learned to operate their lines under adversity, others learned only to view their counterparts with mistrust and suspicion. In the coming months, as obtaining materials became more difficult, these men learned to keep their lines in operation by hoarding materials and by getting as much use as possible from available resources and material reserves. For Southern railroaders

⁷⁴Johnston, “Virginia Railroads,” 328; Black, *Railroads*, 27.

⁷⁵Jeffrey N. Lash, *Destroyer of the Iron Horse: General Joseph E. Johnston and Confederate Rail Transport* (Kent, Ohio: The Kent State University Press, 1991), 36. Colonel Owen may have been a victim

during the Civil War, the enemy did not always wear the blue jacket of the Army of the Potomac.

* * * * *

As the relationship between the North and the South deteriorated and gravitated toward open hostility in 1861, railroad managers and superintendents in the Union and the Confederacy prepared their companies for war. Virginia's road companies focused on obtaining sufficient quantities of iron, workers, and railway-related resources. In the South, industry took a back seat to agriculture and railroad officials realized their ability to support the war effort hinged on the solution to two equally important questions. The first problem centered on whether or not individual company possessed sufficient iron reserves while the second question dealt with the location of replacement iron once the carriers depleted their reserves. When the fighting went beyond the original ninety days so many people estimated, Virginia carrier managers realized all too soon that their stockpiles of iron, scanty enough even by pre-war measures, would not last through the first year of the war. No question garnered more attention than the carrier's ability to locate iron. Without iron, Virginia's railroad superintendents could not support the Confederacy.

To acquire the iron they needed, Virginia's railroad managers turned to the most important foundry complex in the South. Tredegar Iron Works, located in southwest Richmond on a narrow strip of land between the James River and the Kanawha Canal,

of his own military successes. While Johnston's request that Owen replace Whitcomb sat on Davis' desk, Owen was effectively thwarting Unionist bridge builders in southwest Virginia and east Tennessee.

represented Virginia's largest and most important iron-producing establishment.⁷⁶ The railroad boom of the 1830s stimulated the need for iron causing Tredegar forges and foundries to operate day and night to meet the road company's needs.⁷⁷ The Panic of 1837 forced hard times upon Virginia's railroads, however, and the carriers reduced the number of orders sent to Tredegar. Subsequently, when the ironworks suffered from the economic panic, the foundry's board of directors and investors sought someone whom they believed possessed the managerial talents to guide the company back to a position of prominence among America's foundries.⁷⁸ The Iron Works Board of Directors selected Joseph Reid Anderson. Tredegar officials hired the twenty-eight year-old Anderson in 1841 as a commercial agent and from that position, the young man embarked on a career that made him well known in all of the South's industrial circles.⁷⁹ Ambitious and industrious, Anderson acquired enough capital by 1848 to purchase Tredegar from its stockholders for the sum of \$125,000.⁸⁰ In 1859, he changed the foundry's name to Joseph R. Anderson and Company although foundry customers continued to refer to the company by its former name. After the change in ownership, Anderson assumed full

⁷⁶Charles B. Dew, *Ironmaker to the Confederacy: Joseph R. Anderson and the Tredegar Iron Works* (New Haven: Yale University Press, 1966), 3. Tredegar Iron Works derived its name from a well known British foundry located at Tredegar, Wales.

⁷⁷Dew, *Ironmaker*, 2.

⁷⁸Charles B. Turner, "The Early Railroad Movement in Virginia," *Virginia Magazine of History and Biography* 55 (July, 1947): 350-371.

⁷⁹*Confederate Military History*, III, 575. Born in Fincastle County, Virginia, in 1813, Anderson graduated from the United States Military Academy at West Point, New York in 1836 with a commission as a second lieutenant in the Corps of engineers. He subsequently resigned his commission in 1837 but before his departure from military service, he assisted in the building of Fort Pulaski, located at the entrance of the Savannah River. From the time of his resignation from the army until beginning of the Civil War, he served as head of Joseph R. Anderson and Company, principal proprietors of the Tredegar Iron Works. Anderson entered active Confederate military service in September 1861 with the rank of Brigadier general. Assigned to Fredericksburg, Anderson served under General Robert E. Lee and later, while stationed on the Virginia peninsula, reported directly to General Joseph Johnston. Anderson resigned his Confederate commission in July 1862 and returned to Tredegar where he remained for the duration of the war. He died at Isle of Shoals, New Hampshire, September 1892.

⁸⁰Dew, *Ironmaker*, 12-13.

supervisory rights of the iron works.⁸¹ Under Anderson's guidance, Tredegar became "the most important [iron works] in the southern states."⁸² As the nation inched closer to civil war in 1860, Anderson and his staff determined to keep Tredegar atop the industrial mountaintop of the South and to ensure that the company succeeded in meeting the South's iron needs.

Before and during the 1850s, Tredegar drew much of its iron from Shenandoah Valley furnaces. Three principal road companies, the Virginia and Tennessee, the Virginia Central, and the Manassas Gap Railroad delivered pig iron from furnaces located in southwest and west-central Virginia to Richmond.⁸³ Anderson realized the potential profits his company stood to gain if he used the speed and heavy hauling ability of the railroads. As Dew reported, "The eight Virginia railroads chartered between 1846 and 1853 – a total of over nine hundred miles of track – offered a potentially lucrative market for rail chairs, spikes, locomotives, and rolling stock,"⁸⁴ Tredegar changed its course in 1858 when its foundries ceased forging iron rail and instead shifted most of its production to ordnance. Because foundries located in the northern United States and in Great Britain offered iron rail to America's railroads at prices lower than those charged by Tredegar Ironworks, Joseph Anderson found himself outbid by non-Southern

⁸¹Fred Bateman and Thomas Weiss, *A Deplorable Scarcity: The Failure of Industrialization in the Slave Economy* (Chapel Hill: The University of North Carolina Press, 1981), 12. Bateman and Weiss assert that "the name of Tredegar Iron Works itself is perhaps more historically prominent than that of Joseph Reid Anderson."

⁸²Frank E. Vandiver, *Ploughshares into Swords: Josiah Gorgas and Confederate Ordnance* (College Station: Texas A&M University, 1994), 66.

⁸³Dew, *Ironmaker*, 32. By the mid-1850s, only four mills capable of rolling iron bar existed in the South. These mills were located at Atlanta's Gate City Rolling Mill, the Etowah Iron Works at Cartersville, Georgia, the Shelby Mill in Alabama, and the Cumberland Mill located at Fort Donelson, Tennessee.

⁸⁴Dew, *Ironmaker*, 14.

competitors.⁸⁵ Anderson's decision to cease iron rail production had far-reaching effects. Furnace after furnace in the Shenandoah Valley went out of blast, causing the "gap between the diminishing raw materials base in the southern economy and the growing productive capacity of the south's heavy industrial plants to widen as important customers like the Tredegar went north for cheap anthracite pig iron. Virginia furnace men, faced with an inadequate demand for their expensive charcoal pig [iron] had largely ignored the technological advances which spurred on the Pennsylvania pig iron industry in the late 1850s."⁸⁶ Joseph Anderson, however, as intelligent a businessman as he was a talented engineer, kept close watch on the state and national political events. In 1861, Anderson watched the path Virginia took as one southern state after another seceded from the Union. In 1861 when the Virginia General Assembly voted to join the Confederacy, Anderson realized the value his iron works represented to the Confederate States of America as an ordnance and weapons producer.

Beginning April 1861, Tredegar received numerous ordnance orders from the seceding states. Subsequently, the number of tons of railroad iron decreased while the amount of ordnance increased. Anderson, however, grew concerned over the possible loss of railroad business. He set out to ensure the rail superintendents that Tredegar Iron Works remained committed to supporting the road companies.

⁸⁵ John E. Clark, *Railroads in the Civil War: The Impact of Management on Victory and Defeat* (Baton Rouge: Louisiana State University Press, 2001), 6; Dew, *Ironmaker*, 30. Tredegar rolled iron at eighty-five dollars per ton while top grade English refined iron cost seventy-five dollars per ton. Markets in Baltimore advertised common English bar iron at fifty-five dollars per ton and refined American bar iron at sixty dollars per ton. Southern foundries simply priced themselves out of bar iron market.; Taylor and Neu, *The American Railroad Network*, 44. Tredegar foundries required two and one half tons of refined iron ore to produce one ton of rails. Furnaces located in the Shenandoah Valley and other locations throughout Virginia were incapable of processing such large amounts of ore.

⁸⁶ Dew, *Ironmaker*, 176.

In May 1861, Virginia's rail superintendents sought methods to increase their company's iron rail and replacement part reserves. A massive number of orders for spikes, axles, chairs, rail cars, and locomotives reached Tredegar. The Union coastal blockade, however, slowed and then stopped the importation of iron into the Confederacy and Anderson found it difficult to complete railroad-placed orders. Anderson's troubles fulfilling railroad's orders were compounded when Ordnance chief Josiah Gorgas recommended to Secretary of War James Seddon that the War Department impress all iron reserves in the South.⁸⁷ Seddon agreed with Gorgas and the Ordnance Bureau monopolized the Confederacy's iron supply.⁸⁸ Anderson had no choice but to inform Virginia's railroads that while he understood the carrier's need for iron, the more urgent needs of the Confederate government took precedence over road company requests.⁸⁹ Historian Scott R. Nelson explained, "the War Department used requisitions to misdirect the Congress and the public about the use of railway supplies. In its addendum to the 'interstate commerce' clause of the [Confederate] Constitution, Congress had shown its affection for its own ports by preventing support of internal improvements, except the improvement of harbors and rivers. Any extra effort by the War Department on waterways would be greeted by the denizens of Congress like an invitation to a barbecue. To the public, waterways suggested support for the commercial sailors who ran Union blockades to bring food and weapons to the Confederacy as a whole."⁹⁰ The superintendents complained: the combined forces of the Union blockade and Tredegar's cutback on completing railroad orders for iron curtailed the carrier's ability to provide

⁸⁷Vandiver, *Ploughshares*, 115, 147.

⁸⁸Vandiver, *Ploughshares*, 115.

⁸⁹Dew, *Ironmaker*, 126.

effective rail service to Virginia and her citizens.⁹¹ Historian Stephen Collins pointed out, “the unprecedented tonnage of Southern lines created maintenance problems. Track, locomotives, and rolling stock suffered a higher than average pounding. Railway managers warned the [Confederate] government that supplies would soon run out and that iron would become scarce.”⁹² The railroads continued to submit orders to Tredegar, but as Dew noted,

Tredegar was unequipped to meet some of the railroad’s requests. The Works had not manufactured a locomotive since 1860 and the machinists and boilermakers were now preoccupied with more pressing orders. ‘We are so much engaged in defending the country that we cant [sic] stop to build locomotives,’ one of Tredegar’s partners wrote in May 1860. The foundries were engaged almost totally with ordnance work, and the new car wheel foundry, converted to ammunition production during the rush to outfit South Carolina for the Sumter bombardment, was working day and night to supply the Confederate armies. Tredegar carpenters, formerly freight car builders, now devoted their skills to the manufacture of gun carriages.⁹³

Virginia’s railroad superintendents and managers realized that without a sufficient supply of rails and iron for replacement parts, the chances of their lines surviving the war diminished daily. Throughout Virginia, small stockpiles of iron existed at various rail yards or awaited shipment north from mills in Georgia and Alabama. The rail situation, however, continued to deteriorate throughout the Confederacy and iron produced south of Virginia remained in the state which produced the resource. Together with limited company reserves and Southern foundries producing only limited amounts of iron, no sufficient amount of finished iron existed to make a difference in the rail shortage

⁹⁰Scott R. Nelson, “Public Fictions: The Southern Railway and the Construction of the South, 1848-1885.” (Ph. D. diss., The University of North Carolina, 1995), 153

⁹¹Steven G. Collins, “Organizing the South: Railroads, Plantations, and War.” (Ph. D. diss., Louisiana State University, 1999), 117, 103.

⁹²Collins, “Organizing the South,” 117.

⁹³Dew, *Ironmaker*, 160.

problem in either Virginia or the remaining Confederate states.⁹⁴ The Virginia Central, for example, possessed enough iron in its company reserves to cover no more than a distance of ten-miles.⁹⁵ Research indicates that the Virginia Central compared favorably to all other Virginia railroads, however. No other data indicates that any of Virginia's other major railroads possessed enough iron at the end of 1861 to feel comfortable about facing the future with only moderate amounts of iron. As they looked to the future, road company managers saw the urgent need to make whatever materials and resources they had on hand to last as long as possible.⁹⁶

Locomotives and rolling stock in Virginia traveled across two types of iron rail. The secondary, shorter lines used a type of rail known as "strap rail," made from nailing thin iron strips to wooden stringers.⁹⁷ Virginia's primary lines such as the Orange & Alexandria, the Virginia Central, the Seaboard & Roanoke, or the Richmond, Fredericksburg & Potomac journeyed on the heavier and more durable fifty to sixty pound per yard "T" rail.⁹⁸ The lighter-weight strap rail wore out sooner than "T" rail and therefore became more susceptible to wear and breakage under the heavy weights of larger locomotives. Strap rail's wooden stringers splintered or rotted creating unsafe conditions for engineers and passengers. Road company superintendents and presidents made the final decision on which type of rail to use after hearing the advice of yard managers, conductors, and engineers. The cost of the two types of rail also varied and

⁹⁴Black, *Railroads*, 85.

⁹⁵Scott R. Nelson, "Public Fictions," 47.

⁹⁶As noted in chapter two of this study, the Confederacy did not roll one bar of iron rail during the course of the Civil War.

⁹⁷Clark, *Railroads in the Civil War*, 48; Ramsdell, *Behind the Lines of the Southern Confederacy* (Baton Rouge: Louisiana State University Press, 1944), 95.

⁹⁸*Annual Report*, Virginia Board of Public Works, 1861: 48, 59. Strap rail normally weighed sixteen to twenty-two pounds per yard. BPW reports reveal that Virginia carriers used at least nine varieties of rail with the "T" rail and strap rail the most popular.

caused several superintendents to wait as long as possible before replacing their older strap rail with the newer “T” rail. Virginia Central superintendent William Whitcomb waited until early 1862 to replace sections of his company’s strap rail with the more versatile “T” bar.⁹⁹ That Whitcomb waited so long to replace the unsafe strap rail indicates he did so because material shortages and high prices for iron forced him to prolong the life of company resources for as long as possible. Both types of rails wore out faster than normal under the increased wartime traffic. Rolling stock and locomotives sat idle because company mechanics found replacement parts difficult or impossible to obtain. Before the war, Virginia’s railroads required a minimum 16,000 tons of bar rail each year. With the war came greater responsibility and accountability levels. Subsequently, the added number of trains increased the minimum acceptable tonnage to more than 50,000 tons per year at a time when southern mills produced no more than 20,000 tons during any of the four war years.¹⁰⁰ The shortage of rails caused railroads to amend company operations. President Fontaine of the Virginia Central altered company schedules because he refused to allow his conductors to run at prewar speeds over rails so worn that derailment posed a constant danger.¹⁰¹ Phoebe Yates, matron of Richmond’s Chimborazo Hospital, traveled to Augusta, Georgia in 1862. On the return journey, Mrs. Pember noted the poor condition of Virginia’s railroads. “We crawled along,” Mrs. Pember wrote, “stopping every hour almost, to tinker up some part of the car or the road, getting out at times when the conductor announced that the travelers must ‘walk a spell,’

⁹⁹Turner, “The Virginia Central Railroad at War,” 521. Although Turner is not specific about which road company officers advised the individual superintendents, it is certain that these men had enough railroading expertise to know to listen to the men who possessed the greatest levels of railroad-related technical knowledge.

¹⁰⁰Clark, *Railroads in the Civil War*, 66; Turner, *Victory*, 105. Lines that could afford to replace their worn out rails resorted to using the cheaper strap rail, also known as flatbar rail, resulting in trains that moved at slower speeds atop rails that wore out faster than “T” rails.

meaning from one to five miles. Crowds of women were getting in and out all the way, the male passengers grumbling aloud that 'women had better stay at home, they had no business to be running around in such times.'"¹⁰² Mrs. Pember's comments highlight what became a common practice on Virginia's railroads as the war progressed.

Replacement rail, parts, locomotives, and rolling stock remained in such short supply that prices skyrocketed and company executives turned to a practice many of them feared and considered the last resort toward surviving the war: cannibalism of their lines and equipment.

As a result of these shortages, Virginia's railroads managers had no choice but to cannibalize their equipment in order to survive the war. As long as the Union blockade prevented European-forged iron from entering the South, the severe shortage of Southern foundries forced Jefferson Davis and his cabinet to rely on alternative and often-undesirable methods of procuring iron. After Joseph Anderson decided to limit Tredegar Iron Works to ordnance production, railroad superintendents questioned their ability to obtain iron. Anderson and Company continued to receive orders from Virginia's railroads but the small number of completed orders paled in comparison to ordnance production. Across Virginia, rail presidents and their company quartermasters realized the importance of hoarding company iron reserves. The Virginia Central Railroad, the Manassas Gap Railroad, and the Orange & Alexandria sent agents through the blockade to Europe in search of iron but the small amounts brought back made no difference in the war effort. The Union army destroyed every forge they found in central Virginia although a few remained in operation in the Shenandoah Valley until near the end of the

¹⁰¹Black, *Railroads*, 124; Turner, "The Virginia Central," 523.

war. The output of these isolated mills, however, barely measured against the railroad's demands and the amount produced at Tredegar. Railroad iron production lessened each year of the war. In early 1862, to solve the problem, the Virginia General Assembly enacted legislation allowing the Board of Public Works to impress iron from the state's railroads.

Before Virginia's railroads turned to self-imposed and internally directed cannibalism, they faced the threat of having company iron reserves appropriated from them by various offices within the Confederate government. In May 1861, Confederate Secretary of the Navy Stephen R. Mallory turned to Joseph Anderson for engineering and production assistance in converting the former U. S. S. *Merrimack* into the C. S. S. *Virginia*, the Confederacy's first ironclad warship. Secretary Mallory viewed Virginia's railroads and their iron reserves as the closest and most readily available source of iron outside Tredegar Iron Works. In August 1861, Confederate forces removed rail belonging to the Baltimore & Ohio, the Winchester & Potomac, and the Virginia Central in to prevent the iron from falling in the hands of the Union army. Secretary Mallory promptly confiscated the rail and sent it to Tredegar for melting.¹⁰³ Mallory continued to scour the Virginia countryside and in February 1862 he impressed the iron rail of a little-used spur owned by the Richmond, Fredericksburg & Potomac Railroad outside Richmond.¹⁰⁴ Rail superintendents across Virginia cried foul, convinced that Mallory intended to strip the railroads bare of all available iron. Because the *Merrimack* had yet to sail, RF&P president Peter Daniel complained to Jefferson Davis that the railroads

¹⁰²Phoebe Yates Pember, *A Southern Woman's Story* (Jackson, Tennessee: McCowat-Mercer Press, 1959), 119.

¹⁰³Dew, *Ironmaker*, 115-116; *Battles and Leaders of the Civil War*, 4 volumes, (New York: Century Press, 1884-1888), I: 631.

needed the iron more than “any hypothetical fleet.”¹⁰⁵ Complaints to the president of the Confederacy had little effect and Mallory continued to take as much iron from the railroads as his agents found. As Secretary of the Navy, however, Mallory acted within the law. The Virginia Legislature enacted legislation in 1862 providing Mallory with the authority he needed to impress iron from the railroads. The Assembly delegated to the Board of Public Works the power to “take possession of and use any rail iron, cross ties, and other materials” necessary to further the Confederate war effort.¹⁰⁶ Using the Assembly’s legislation as his primary tool, Mallory impressed iron from Virginia’s railroads before the road companies had the chance to secrete it away into hiding.¹⁰⁷ Mallory’s agents sent impressed iron to Richmond where Tredegar foundry workers melted it and forged it into the thick plates that became the *Merrimack*’s sides. It is ironic that in the first great battle of ironclads, the Confederates sent out a ship protected, to some degree, with recycled iron. For the remainder of the war, despite the pressing needs of the railroads, Tredegar diverted great quantities of iron away from the railroads and to the Department of the Navy. Virginia’s rail superintendents determined to prevent the Confederate government from impressing or confiscating iron supplies the carriers need to continue operations. Unfortunately for the road companies, they could do little about their predicament. Allowing the Confederate government to dictate control over

¹⁰⁴Dew, *Ironmaker*, 116.

¹⁰⁵Black, *Railroads*, 200.

¹⁰⁶*Acts of the General Assembly of the State of Virginia, 1861-1862*: 69.

¹⁰⁷Dew, *Ironmaker*, 122. There was a cost for Mallory’s speed in impressing iron from Virginia’s railroads. In October 1861, the initial shipment of the *Virginia*’s iron-plated sides were ready for shipment to Norfolk’s Gosport Navy Yards. J. R. Anderson petitioned Thomas H. Wynne, superintendent of the Richmond & Petersburg Railroad, for enough cars and engines to transport the iron to where the ironclad sat waiting for the plates. Wynne turned down Anderson’s request. Earlier in the year, Joseph Anderson and Company had refused to honor orders placed by the R&P for replacement iron parts. The R&P had reached a point, Wynne informed Anderson, where it simply did not have an adequate number of

iron distribution and production established a dangerous precedent. Rail carrier superintendents feared that as the war progressed and conditions in the railroads worsened, their companies would suffer in a variety of ways. Their fears turned to reality in September 1862. At Tredegar, the number of completed railroad orders diminished while the number of orders placed by the War Department and the Department of the Navy increased.¹⁰⁸ Requests for parts and iron by Virginia's railroad superintendents continued to arrive at Tredegar but "Mallory's decision to stake the naval fortunes of the Confederacy on ironclads soon reversed the Tredegar's sales patterns. The [ironwork's] partners quickly discovered that they could not supply both the government and the railroads with adequate supplies of rolled iron."¹⁰⁹ In November 1862, Anderson and Company ceased completing railroad contracts altogether.¹¹⁰

In May 1863, the Confederate Congress enacted Resolution 98. Aimed at facilitating rail transportation in the South, the act opened the door for any government agency needing iron to take it from the railroads. The act stated:

Whenever it shall be necessary to the public to remove the rails or other moveable structure, or the machinery of any railroad, in order to repair, extend, or alter another roadway or to construct any side track, water stations, warehouses or other structures connected with any railroad, such work shall be under the direction of the President, and promptly executed under the control and superintendence of the officers of such railroads.¹¹¹

Resolution 98 provided Secretary Mallory and Secretary of War James Seddon with the legislative authority to impress iron from a decreasing supply of the resource. Everyone who needed iron went to the railroads. Robert Black wrote "the Confederacy swarmed

operational engines and rolling stock to transport the iron to Norfolk. Subsequently, the *Virginia's* entry into the war was delayed by at least two months.

¹⁰⁸Dew, *Ironmaker*, 127-128.

¹⁰⁹Dew, *Ironmaker*, 128.

¹¹⁰*Ibid.*

with the impressment agents of a dozen different departments, offices, and commands, each laying claim to the available stocks of railroad iron like a quarrelsome prospector. It was obvious that procurement of the metal should be regularized, but the Government as usual let matters drift until they became quite impossible.”¹¹² The lack of iron caused Virginia’s railroads to continue operations under extremely dangerous conditions. Without repair parts or track, locomotives and rolling stock broke down and remained that way until one of the foundries in the Deep South provided replacements.

Because of these demands and the deteriorating railroad conditions, carrier presidents and superintendents experienced high levels of stress during the Civil War. Prices soared on the few available replacement parts and the carriers sought alternative methods of procuring materials. As the Union army tightened the military noose around Virginia, the state’s railroads learned of more track destroyed and sent north. Subsequently, each of Virginia’s railroads looked inward for solutions to the questions of how to survive the war, how to continue to support the war effort, and how to serve the public and the military at the same time.

The Virginia Central Railroad provides an excellent example of a railroad suffering government intervention while also enduring internal disruption. Possessing the greatest number of track miles in Virginia, the VCRR experienced dramatic setbacks in operations because so many miles of its track ran through or on the edge of the majority of Virginia’s battlefields.¹¹³ In 1861, superintendent Henry Whitcomb directed

¹¹¹“An Act to Facilitate Transportation for the Government,” *Acts of the General Assembly, 1861-1862*, 68-169.

¹¹²Black, *Railroads*, 205.

¹¹³The Virginia Central suffered more damage than any other railroad in Virginia during the Civil War. Union soldiers captured the Manassas Gap Railroad and large sections of the Orange & Alexandria Railroad in September 1863. While the O&A continued to operate in central Virginia, the MGRR did not return to Confederate service.

company labor teams to uproot several of the carrier's spur lines in order to secure replacement rail for the Central's more heavily traveled sections.¹¹⁴ In July 1863, General Robert E. Lee's Army of Northern Virginia (ANV) limped its way back to Virginia after the defeat at Gettysburg. Lee and the ANV stopped briefly in Staunton to leave the wounded at the hospital and the railroad depot for eventual transfer to Richmond's Chimborazo Hospital. Before the war, and even into the early stages of the conflict, the journey from Staunton to Richmond required but one day's time. Yankee cavalrymen, however, habitually destroyed several miles of track belonging to the Virginia Central east of Charlottesville and near the vital rail junction with the Orange & Alexandria at Gordonsville. The one-day journey grew to two days and often longer, depending on the level of track or bridge destruction. In May 1864, Confederate Engineer Bureau Chief General Jeffrey Gilmer ordered the Virginia Central to dismantle its line west of Goshen, Virginia, and to send the pulled-up rail to the Central's more heavily traveled sections east of the Blue Ridge Mountains. Consequently, rail operations west of the Shenandoah Valley ceased for the remainder of the war.¹¹⁵ With rail traffic eliminated from Virginia's primary crop-producing region, farmers located in the foothills of the Allegheny Mountains resorted to transporting their produce to the Virginia Central depot at Staunton by wagon train, a journey that, in many cases, required several days to complete.¹¹⁶ Historian Charles Ramsdell described the cause and effect relationship between cannibalization and the ever-shrinking area of operations experienced by Virginia's railroads. Ramsdell wrote "while the expedient of feeding the

¹¹⁴Turner, "The Virginia Central Railroad at War," 521.

¹¹⁵Turner, "The Virginia Central Railroad at War," 522.

weak roads to the more important afforded the latter some temporary sustenance, it seriously weakened the armies, since it steadily reduced the area from which supplies could be drawn.”¹¹⁷ Ramsdell failed to point out that gaps in the line slowed the transfer of goods from one railroad to another. The Virginia Central maintained a yard in Richmond where it received goods from other railroads whose lines terminated in the capitol city. At Gordonsville, the Virginia Central shared a dept and marshaling yards with the Orange & Alexandria. As long as gaps or intentionally created breaks existed in any section of the VCRR’s line, goods either arrived late at their destinations or they did not arrive at all. When trains encountered breaks in the rail conductors had to wait until work crews repaired the breakage. In war, time is as precious a commodity as food and ammunition. The longer badly needed materials sat on side spurs or at gaps, the more precarious the situation became for Confederate forces or the civilians who waited on the goods.

The Virginia Central did not suffer alone. Across the state, each of Virginia’s railroads endured worn equipment and maddening shortages. During the Civil War, every railroad in Virginia experienced gaps in the line, destroyed locomotives and rolling stock, and a loss of revenue. The longer the war lasted, the less the Confederate soldier received in the way of ammunition, rations, and clothing. In December 1861, Captain Thomas J. Goree, aide to General James E. Longstreet, described the rail situation on the Manassas Gap Railroad in northern Virginia. Goree wrote, “so inadequate is the amount of freight to be transported that it is almost impossible, from what I hear, to have

¹¹⁶Miners near Covington and Clifton Forge also resorted to wagons to haul coal across mountains on narrow, winding roads. During winter, the journey became more dangerous when surface roads froze or turned to mud.

anything transported through quickly and safely.”¹¹⁸ By late December 1862, excessive wear and tear and the lack of replacement rails, locomotives, and rolling stock forced the Norfolk & Petersburg Railroad into an area of operations that included no more than forty miles of track. The N&P owned twice that distance of track at the beginning of the war.¹¹⁹ Less than a month later the Seaboard & Roanoke Railroad counted less than twenty miles of serviceable track of an original sixty miles claimed in July 1862.¹²⁰ West of Richmond, on the Southside Railroad, sections of rail became so worn by July 1863 that company president Henry D. Bird instructed workers to remove more than two miles of track from the company’s City Point branch. Bird sent the recycled rail to several areas deemed most critical and had workers reinstall the rail to keep the line between Richmond and Lynchburg open.¹²¹ Company-level cannibalism and relocation of materials served the dual purpose of saving many of Virginia’s carriers from an early death while keeping the iron out of the hands of Union soldiers.

Before the war, and depending on the volume of traffic and the weight of locomotives and rolling stock, road company quartermasters expected iron rail to last ten to fifteen years. Superintendents and maintenance managers expected engines and rolling stock to last at least the same length of time as iron rail, if not longer. The Confederate government’s expectations that road companies would use iron rail or engines beyond

¹¹⁷Charles W. Ramsdell, “The Confederate Government and the Railroads,” *The American Historical Review* 22 (July 1917): 794-810.

¹¹⁸Thomas W. Cutrer, ed., *Longstreet’s Aide: The Civil War Letters of Major Thomas J. Goree* (Charlottesville: The University Press of Virginia, 1995), 123.

¹¹⁹Brian Steel Wills, *The War Hits Home: The Civil War in Southeastern Virginia* (Charlottesville: The University Press of Virginia, 2001), 192.

¹²⁰Wills, *The War Hits Home*, 99. Seaboard & Roanoke linemen attempted to repair several miles of worn out track but were continually harassed by Union cavalymen. So effective were the Union soldiers at interrupting the repair work that the S&R superintendent elected to dismantle the line east of Franklin, Virginia, rather than extend the line outside the town.

reasonable and safe technological limits pushed the carriers to risk permanent damage to their equipment.¹²² What remained of Virginia's prewar and once-dominant railroads bore no resemblance to the ghost of a railway system in April 1865.

In addition to facing shortages of iron and other valuable resources, Virginia's railroads also confronted labor shortages. Labor on Virginia's railroads became a priority as soon as men left their road company jobs to serve in the Confederate army or navy in April 1861. Soon after the firing on Fort Sumter, railroad superintendents and ground-level managers realized the need for workers posed as large a problem as the availability of iron.

For the first time in American military history, labor and war coupled on a dramatic scale. Nothing that occurred before the Civil War prepared railroad superintendents and presidents for the events they experienced 1861-1865. In April 1861, superintendents and mid-level managers had nothing to serve as a precedent in which to compare their concerns about labor. As shortages in the supply of white labor reached chronic levels, the railroads and heavy industries scrambled to find workers. Railroads needed workers strong enough to withstand long hours of back breaking work. Most importantly, however, Virginia's road companies needed a dependable source of labor, immune from military conscription and continuous in nature. Labor shortages on Virginia's railroads did not appear until after September 1862. After the battle at Antietam, the lack of available workers reached epidemic levels. As the war progressed,

¹²¹Black, *Railroads*, 124. Black noted that the "Richmond & Petersburg similarly robbed Peter to pay Paul with the iron from its Port Walthall spur."

¹²²OR, IV (II), 512-513. Richmond, Fredericksburg & Potomac President Peter Daniel explained in an 1863 letter to Secretary of War Seddon that even under the best of conditions, wartime requirements dramatically shortened the life of rails, engines, and rolling stock. The overall productivity of each line, Daniel explained, would be compromised.

each of Virginia's railroads faced the labor shortages with a variety of solutions. Because agriculture ruled supreme over industry in the state, Virginia's carrier superintendents worked to remove workers from the field and put them to work on the iron rail.¹²³

Albro Martin wrote that the most disruptive yet creative force ever to effect workday America was the need to man the country's railroads.¹²⁴ Northern and Southern road companies created a new socioeconomic class consisting of middle class laborers who earned a fair wage while becoming the symbol of the Industrial Revolution in the United States.¹²⁵ This middle-class worker who reported to his railroad job everyday brought a responsibility to perform his assigned tasks as best he could. Except for the specialty skills of engineer, mechanic, and conductor, very little on-the-job training occurred. As Martin described, "workers had to be sound of limb – that is, 'had two of everything,' – but other than that condition, not much else was required of Civil War

¹²³ A number of works exist that describe the relationship between Civil War railroads and the labor needed to keep Confederate railroads operative. A short lists of these works, notable for their descriptions of how road companies solved labor and railroad-related difficulties during the war includes some of America's best-known historians. See, for example, Robert C. Black, *Railroads of the Confederacy* (Chapel Hill: The University of North Carolina Press, 1952); Albro Martin, *Railroads Triumphant: The Growth, Rejection, and Rebirth of a Vital American Force* (New York: Oxford University Press, 1992); Charles B. Dew, *Ironmaker to the Confederacy: Joseph R. Anderson and the Tredegar Ironworks* (New Haven: Yale University Press, 1966); Richard D. Goff, *Confederate Supply* (Durham: Duke University Press, 1969); Walter Licht, *Working for the Railroad: The Organization of Work in the Nineteenth Century* (Princeton: Princeton University Press, 1983); Fred Bateman and Thomas Weiss, *A Deplorable Scarcity: The Failure of Industrialization in the Slave Economy*; Alfred D. Chandler, *The Railroads: The Nation's First Big Business* (New York: Harcourt, Brace, & World, 1965); George Rogers Taylor, *The Transportation Revolution, 1815-1860* (New York: Rhinehart & Company, 1951); George Rogers Taylor and Irene D. Neu, editors, *The American Railroad Network, 1861-1890* (Cambridge: Harvard University Press, 1956); James A. Ward, *Railroads and the Character of America, 1820-1887* (Knoxville: The University of Tennessee Press, 1986); Angus J. Johnston, "Virginia Railroads in April 1861," *The Journal of Southern History* 23 (August 1957): 307-330.

¹²⁴ Martin, *Railroads Triumphant*, 305.

¹²⁵ Ibid. Martin wrote that superintendents did not realize the "complexity and potentially violent forces that would have to be reckoned with in forging a whole new approach to the conditions of work and the relationship between those who pay and those who are paid."

railroad employees.”¹²⁶ Often referred to by the British term, “navvies,” many railroad employees began their careers with the road companies as right-of-way workers or trackwalkers who repaired broken rails.¹²⁷ Across Virginia, men worked for the railroads because they knew the carriers offered steady work. They also realized that working for a railroad gave them the opportunity to bring home a decent pay, while providing them with the ability to feed, house, and clothe their children and spouses. Railroad work was dangerous, to be sure, but working for a road company also afforded the opportunity to make something of oneself while helping to build what became the greatest enterprise in the United States.

The Civil War forced railroad managers to think in new ways. New ideas and practices in time management, technological use, command and control, and organizational control appeared in the workplace, most particularly in railroad workshops.¹²⁸ Intermediate level managers implemented new and effective management strategies resembling precise military practices. Accordingly, mid-level supervisors became the crucial informational link at the workplace.¹²⁹ Railroad labor, however, required a strict adherence to company rules by both employee and manager. Because company presidents designed their regulations with safety in mind, workers who violated safety policies or performed unsafe acts faced immediate consequences, most often resulting in termination. To ensure a safe environment in the machine shops and freight

¹²⁶Martin, *Railroads Triumphant*, 307-308. At the beginning of the Civil War, most railroad employees could neither read nor write but could assure themselves of steady employment as long as they did what they were told.

¹²⁷Ibid.

¹²⁸Collins, “Organizing the South,” 7.

¹²⁹Robert W. Holzweiss, “Politics, Profits, and the Public Interest: Government, Railroads, and Interest Groups, 1827-1976,” (Ph. D. diss., Texas A & M University, 2001), 21.

yards, road company managers fired workers who willfully or habitually disobeyed company regulations.¹³⁰

In addition to enduring prolonged material shortages, Virginia's railroads suffered a scarcity of trained mechanics. While superintendents believed that most workers possessed the ability to learn common labor skills, they also believed mechanics possessed irreplaceable skills acquired from years of experience and under a variety of conditions. Road company superintendents did not believe apprentices possessed the talents to replace an experienced mechanic. Historian Henry Steel Commager pointed out that at the beginning of the war, mechanics exercised one of four options. Commager described how a number of northern-born mechanics remained in the South but left their road company jobs to remain in the South to seek employment elsewhere, the memory of the Antebellum depression still fresh in their minds. Many Southern mechanics left their jobs to join the Confederate army or navy. Fortunately for Virginia's railroads, Commager pointed out that most mechanics realized their relative value to Virginia's carriers and remained at their jobs because "it seemed the right thing to do."¹³¹ Still, many carriers in Virginia experienced a shortage of mechanics. Economist Eugene Lerner attributed the roots of the railroad labor shortage to the time before the Civil War. Lerner explained that the majority of immigrants arriving in the United States between 1840-1850 remained in the industrial North. Consequently, the number of skilled workers in the South remained low and inadequate for the population.¹³² James Ely

¹³⁰Collins, "Organizing the South," 30; Holzweiss, "Politics, Profits, and the Public Interest," 22.

¹³¹Henry Steel Commager, *The Defeat of the Confederacy*, (Princeton: D. Van Nostrand and Company, 1964), 157.

¹³²Eugene M. Lerner, "Money, Prices, and Wages in the Confederacy, 1861-5," *The Journal of Political Economy*, 63 (February 1955): 20-40: 30, 34. Lerner reported that approximately forty percent of white, military-age men in the south joined the army, leaving their railroad jobs to be filled by wounded veterans, women, slaves, or elderly men, all less skilled and less productive than the men for whom they replaced.

wrote that the disparity in the number of skilled employees between the Union and the Confederacy caused many Southern railroad superintendents to believe the entire rail system faced certain collapse as early as 1862.¹³³ While the complete breakdown of Virginia's railroads did not occur until 1865, rail officials found the climbing number of labor concerns detrimental to successful railroad operations. Railroad agents, hoping to replenish the number of railway workers, traveled to villages and towns to recruit men for the railroads.

Two races of men worked on Virginia's railroads. White workers, mostly illiterate, were of agricultural origins. Many white workers worked their way up the employment ladder so that after several years on the job they enjoyed steady work at skilled positions. Railroads also hired slaves from local plantations. Except in isolated cases, all wages earned by slaves went to the owner. Periodically, to save money, railroads purchased slaves and made them company property.¹³⁴ Virginia's railroads provided company-owned slaves with provisions, housing, clothing, and tools.

Confederate conscription also affected the railroads. Although the Confederate Congress enacted two conscription acts in April 1862, neither act greatly affected the railroads because both acts granted exemptions to railway workers.¹³⁵ After the first conscription act, the Confederate Congress separated its male citizenry into two classes: one, the soldiers, men who took up arms to defend the South; second, the producers, who consisted of Confederate and state officers, mail carriers, miners, furnaces and foundry

¹³³ James W. Ely, Jr., *Railroads and American Law*, (Lawrence: The University Press of Kansas, 2001), 44: Collins, "Organizing the South," 119.

¹³⁴ Clement Eaton, "Slave Hiring in the Upper South: A Step toward Freedom," *The Mississippi Valley Historical Review* 46 (March 1960), 663-678.

¹³⁵ Black, *Railroads*, 129; *Journal of the Congress of the Confederate States of America* (58th Congress, 2d Session) (7 volumes, Washington, Government Printing Office, 1904-1905), V. 90, 95.

operators, and railroad employees.¹³⁶ By August 1862, the War Department granted more than 5,700 railroad-related exemptions while deferring 400 more railway workers at the beginning of September.¹³⁷ Winter disease-related deaths as well as manpower losses during the summer of 1863 caused the Confederate Congress to rethink railroad worker exemptions. “Southern manpower was so visibly on the wane, “ Black wrote, “that the Confederate Congress talked of drafting all able-bodied railroad workers under the age of forty-five and replacing them with older men and disabled veterans.”¹³⁸ Richmond, Fredericksburg & Potomac president Peter V. Daniel and a host of other rail presidents lobbied Congress for new conscription laws that continued to exempt railroad employees.¹³⁹ In lengthy speeches before the Confederate Congress, Daniel and his associates attempted to convince the legislators and the Secretary of War that the continued drafting of railroad employees ended the railroad’s ability to support the war effort. Without sufficient numbers of trained railroad employees, Daniel warned, the Confederacy needed in excess of one thousand wagon drivers and more than four thousand horses to haul the same amount of materials one train and its boxcars carried *in*

¹³⁶Albert Burton Moore, *Conscription and Conflict in the Confederacy* (New York: MacMillan Company, 1924), 53; *OR*, IV, (I), 1081. The Conscription Act of April 16, 1862 also allowed for exemptions for ferrymen, river pilots, telegraph operators, ministers not already in uniform, college presidents and professors, teachers of the hearing impaired, school teachers with more than twenty students, asylum presidents, and one druggist per drug store.

¹³⁷Moore, *Conscription and Conflict*, 54; Black, *Railroads*, 130.

¹³⁸Black, *Railroads*, 215. Superintendents grew convinced that the new conscription laws would further restrict their companies. Already hampered by the lack of iron and other railroad-related materials, rail executives saw their engines and mechanic shops being staffed with men who, because of injuries sustained in battle, might not be capable of performing the heavy labor.

¹³⁹*Ibid.* Among those who accompanied Daniel were Edmund Fontaine of the Virginia Central, Thomas H. Campbell of the Southside, and John M. Robinson of the Seaboard & Roanoke.

one day.¹⁴⁰ The Confederate Congress listened to Daniel and his colleagues and the new draft legislation died in committee.¹⁴¹

Virginia's carriers escaped the draft, but only barely. Teen-aged workers, exempt from the first conscription act, left their rail jobs to join their fathers and brothers in the army or navy. Every railroad in Virginia experienced manpower shortages and so began to search anew for workers. According to historian Allan Nevins, Virginia's railroads expressed difficulty in attracting European workers because "the hardships of inflation and the threat of conscription repelled foreigners, and of the few who came, a great many soon departed."¹⁴² The number of white workers dropped and coupled with each company's material shortages, so too did the carrier's ability to perform at maximum effectiveness. In 1862, railroad superintendents and presidents came up with a plan they believed solved at least some if not all of their labor problems. They turned to the local plantations for support.

Along with Irish immigrants, slaves played an important role in building Virginia's rail system. During the war, every industry in Virginia competed for slave labor, including the railroads.¹⁴³ At the beginning of the war, Confederate officials did little except to encourage patriotic slaveowners to volunteer their slaves to the

¹⁴⁰Black, *Railroads*, 216.

¹⁴¹Ibid. The railroads escaped, but just barely. The War Department raised the minimum conscription age to fifty and moved to ensure tighter exemption criteria for future drafts. After 1863, military draft regulations called for the number of railroad employees per railroad not to exceed in number the miles of rail devoted to transportation. Additionally, Confederate railroads were required to report by name and age any employee who held an exemption as well as the current health status of the employee. Conscription-exempted employees could not leave their jobs with the carriers without risking forfeiture of their exempt status.

¹⁴²Allan Nevins, *War For the Union* (New York: Konecky & Konecky, 1971), volume 4, "The Organized War," 238.

¹⁴³Blacks also worked on coastal defenses, trenches, and they buried Union and Confederate dead. They widened Richmond's streets and labored as stevedores on Norfolk's piers.

Confederate war effort.¹⁴⁴ Slaveowners, however, hesitated at sending their slaves to the railroads because “the railroads were not war institutions. There had always been an apprehension in the South that the railroads were a potential and often menace to slave property.”¹⁴⁵ Despite the need for labor, railroads did not always rush to hire slaves. Too often, slaves displayed an emphatic dislike for the heavy work required keeping the rails in operation and either worked too slowly or ran away at the first opportunity. By the end of 1862, more than one third of all slaves hired by the Richmond & Danville Railroad ran away.¹⁴⁶ Financially, slaves earned for their masters less pay per day than white workers who worked the same number of hours.¹⁴⁷ The carriers soon realized the high costs of hiring bondsmen to perform railroad work. Road companies fed and housed slaves yet they also paid armed guards to watch over them.¹⁴⁸ As costs for slave labor increased, railroad superintendents sought solutions to help their companies defray the cost hiring additional workers. Rail officers knew they had two alternatives in regards to slave labor. Carriers had the option to purchase slaves and claim them as company property or to make seasonal contracts with slaveowners that specified a guaranteed wage.

Virginia’s carriers debated the benefits of purchasing slaves versus temporarily hiring the workers from slaveowners. While smaller lines such as the Richmond & Petersburg opted to hire slaves, larger lines such as the Virginia and Tennessee Railroad in southwestern Virginia chose to buy bondsmen. The choice to buy or hire slaves lay

¹⁴⁴Bernard H. Nelson, “Confederate Slave Impressment Legislation, 1861-1865,” *The Journal of Negro History* 31 (October 1946): 392-410: 399.

¹⁴⁵Harrison A. Trexler, “The Opposition of Planters to the Employment of Slaves as Laborers by the Confederacy,” *The Mississippi Valley Historical Review* 27 (September 1940): 211-224: 221.

¹⁴⁶Lerner, “Money, Prices, and Wages,” 35.

¹⁴⁷Lerner, “Money, Prices, and Wages,” 36. Slaves received twenty-five cents less per day than the average white worker. In May 1863, white railroad workers received an average of \$3.25 per day while slaves earned \$3.00. By July 1864, whites averaged \$6.00 and slaves received \$5.75 per day/ All monies earned by the slaves went to their owners; Collins, “Organizing the South,” 42; Eaton, “Slave Hiring,” 670.

with the individual carrier. Hired slaves returned to the plantation after a time specified by a contract and the owner received his pay as agreed on by himself and the railroad.¹⁴⁹ When the inflation-riddled Confederate economy worsened in 1862, several railroads chose to purchase slaves rather to hire them. The Virginia Central, the Manassas Gap Railroad, and the Orange & Alexandria each purchased slaves on the belief that doing so proved more cost-effective than renting the bondsmen.¹⁵⁰ Purchasing slaves in large quantities hit a roadblock when the Confederate war economy worsened and owners grew reluctant to permanently release their slaves through purchase. Owners too often agreed to terms with railroads only after lengthy negotiations and much bickering. It became clear to the road companies that hiring slaves was more troublesome than simply buying them. Inflation, ever on the increase in the Confederacy, prevented the carriers from hiring adequate numbers of slaves. Projects went unfinished or were postponed, slaves ran away at the first opportunity, and Federal soldiers freed any slaves they encountered as the Union army rolled across Virginia. In 1862, rail superintendents again turned to the Confederate Congress for help.

Congress answered the superintendent's pleas. The first legislative act allowing for direct slave impressment appeared in April. Fairly weak because each Confederate state and not the government retained the right to impress slaves, the act carried a strictly

¹⁴⁸Lerner, "Money, Prices, and Wages," 36.

¹⁴⁹Licht, *Working For the Railroad: The Organization of Work in the Nineteenth Century* (Princeton: Princeton University Press, 1983), 88. Negotiations with owners were often tricky and were completed only after the railroad agreed to provide shelter, food, and medical care for the slave; Collins, "Organizing the South," 42.

¹⁵⁰Collins, "Organizing the South," 40-41. Collins wrote, "the decision to purchase slaves centered primarily on tight market conditions. The Chief Engineer of the Richmond & York Railroad reported in 1860 that the supply of labor appeared so scarce that rented slaves were almost impossible to obtain. In response, he argued, the railroad should consider buying slaves; Black, *Railroads*, 30.

provincial nature.¹⁵¹ To ensure Virginia's railroads obtained sufficient amounts of slave labor, Governor John Letcher pressed for and acquired an implementing act from the General Assembly.¹⁵² The success of the Virginia slave impressment acts, according to historian May Spencer Ringold, lay largely with county courts and the impressment agent's ability to wrest the slaves away from the owners.¹⁵³ In August 1862, Governor Letcher received additional legislative firepower from the Virginia senate. Under the new law, the Governor had the authority to impress slaves between the ages of eighteen and forty-five for a period not to exceed thirty days. Slave owners received sixteen dollars per month for the impressed slave, a fourteen dollar reduction from the earlier thirty-dollar rate awarded to owners who volunteered their slaves.¹⁵⁴ The Confederate government also guaranteed direct payment to the owners for slaves who ran away or escaped.¹⁵⁵ To supplement the payment from the government, a number of owners required the carriers to purchase life insurance policies on their bondsmen. Although owners normally insured their slaves against accidental death, most insurance agencies refused to cover the slave for his or her full value. Railroad historian Todd Savitt reported that "the maximum [amount covered] was two-thirds or three-quarters of the stated valuation, not to exceed \$800."¹⁵⁶

¹⁵¹ May Spencer Ringold, *The Role of the State Legislature in the Confederacy* (Athens: The University of Georgia Press, 1966), 32.

¹⁵² Ringold, *State Legislatures*, 34; *Acts of the General Assembly of Virginia, Called Session, 1862*: 608.

¹⁵³ Ringold, *State Legislatures*, 34. Slave impressment officers in Virginia encountered open hostility and outright indignation from slaveowners. In several counties in Virginia, particularly in the mountainous and rugged southwest corner of Virginia, the slave population for that region was so low that not a single slave was impressed; Collins, "Organizing the South," 42. In October 1862, agents for the Richmond & Danville paid a slave owner the sum of \$1,379 as reimbursement for a slave who died while re-laying rail. As Collins wrote, to avoid paying high sums, "some railroads stipulated contractually that the company bore no responsibility for accidents from any cause whatsoever."

¹⁵⁴ Bernard Nelson, "Confederate Slave Impressments," 395: *The Journal of the Virginia Senate*, 1862, 608.

¹⁵⁵ Scott Nelson, "Public Fictions," 49.

¹⁵⁶ Todd L. Savitt, "Slave Insurance in Virginia and North Carolina," *The Journal of Southern History* 43

Slave impressment succeeded in Virginia. By November 1862, more than 1,200 slaves worked on Virginia's railroads. In March 1863, Secretary of War Seddon made labor recruitment a department priority. He pushed for and won another slave impressment act in March 1863.¹⁵⁷ The second conscription act called for the impressment of slaves by Confederate army officers, but only in conformance with state, local, and federal laws and only when the owner provided his consent for the impressment.¹⁵⁸ Until the surrender at Appomattox in April 1865, impressed slaves worked on every railroad in Virginia. Hired bondsmen dug ditches, laid crossties, repaired rail breaks, and cut cordwood for locomotives. British businessman William Corsan toured the Confederacy in 1863 and observed several hundred slaves in Petersburg repairing sections of the Norfolk & Petersburg Railroad. Corsan also witnessed slaves repairing track on the Southside line south of Richmond.¹⁵⁹ Confederate war clerk E. R. Jones witnessed more than 2,500 slaves repairing the Piedmont railroad in Richmond. "Such employment," Jones wrote, "served to release the able-bodied white males for the army and thereby increased the manpower potential of the South."¹⁶⁰ Under the eyes of armed guards, slaves performed the backbreaking work in all types of climate and weather. From time to time, they received punishment for offenses ranging

(November 1977): 583-600: 585, 537. When one slave owner attempted to insure several impressed slaves for the value of \$1,000 each, underwriters at the Richmond Fire Association refused to insure the slaves for more than \$600 each.

¹⁵⁷Savitt, "Slave Insurance," 590, 592. The price of slave insurance rose to its highest level in January 1864. Insurance companies also placed tighter restrictions on the slaves they insured, requiring that bondsmen covered by an insurance policy meet a set of rigid guidelines in relation to the slave's health and age. Some insurance companies refused to insure slaves at all. The Lynchburg Hose and Fire Company refused to take any risks on Negroes and so refused to offer insurance policies for slaves.

¹⁵⁸Confederate States of America, *Journal of Congress*, 1st Session, III: 191; Bernard Nelson, "Confederate Slave Impressment," 395; Trexler, "Opposition of Planters to Employment," 213. Impressment fees increased to twenty-two dollars per month. Slaves also received "a half pound of meat and three-quarters of a pound of meal a day."

¹⁵⁹Benjamin H. Trask, ed., *Two Months in the Confederate States: An Englishman's Travels Through the South* (Baton Rouge: Louisiana State University Press, 1996), 77.

from working to slowly or for raising their voice to a guard. Describing slave discipline, historian Robert Starobin explained that railroads quickly discovered the value of rewards. According to Starobin, “one effective means of disciplining workers and increasing their efficiency was the system of rewards and incentives associated with industrial slavery. Such indirect controls consisted of the simple device of granting holidays and the more sophisticated one of giving money or commodities to slaves.”¹⁶¹ Slave owners did not care for the slave impressment acts. The more time a slave spent away from the plantation, the less they produced for the slave owner. Slaves left untouched by the impressment acts worked harder and longer to make up for the absences of the impressed slaves. By the fall of 1864, owners balked at sending their slaves to the railroads. Once again, Virginia’s railroads found themselves pressed for labor.

Two events occurred in 1864 that affected Virginia’s railroad labor. Virginia’s railroads reached the breaking point when their lines no longer met technological demands. Rapidly deteriorating rail conditions caused Virginia’s rail superintendents to realize no solution existed to the question of where to find replacement parts or qualified engineers and mechanics. Additionally, Virginia’s railroads discovered that as more white workers left to serve in the army or navy, the number of slaves impressed because of the 1863 acts no longer sufficed to cover their manpower losses.

The carriers had no alternative but to return to Congress and seek another slave impressment act, more strict in its demand for slaves than the first act and less flexible and forgiving to owners who refused to obey the law. Congress amended the 1863 act and in February 1864, enacted additional slave impressment legislation. The 1864 Slave

¹⁶⁰E. R. Jones, *The Diary of a Rebel War Clerk at Richmond* (Philadelphia: n.p., 1866), 183.

Impressment Act provided the Secretary of War greater latitude in the number of impressed slaves as well as the method in which they were removed from their owners.¹⁶² Allan Nevins wrote, “if [Secretary Seddon] could not procure sufficient numbers of slaves for service, then he was authorized to impress additional slaves, up to a maximum of 20,000.”¹⁶³ The 1864 impressment act provided the Confederacy with enough slaves to work the railroads for an extended period. In the end, however, slaves had the last laugh on Virginia’s railroads. On the morning of April 8, 1865, the Southside Railroad delivered four trainloads of rations from Lynchburg to the tiny hamlet of Appomattox Courthouse where Lee’s starving army waited. Days earlier, impressed slaves repaired damaged rail leading into Appomattox and belonging to the Southside Railroad. Confederate soldiers had barely begun to distribute the supplies when blue-coated horsemen under General Phil Sheridan charged upon the Confederates and captured the boxcars and locomotive. Southern soldiers, driven half-crazy with hunger attempted a series of counterattacks to retake the train and its contents. Yankee cavalrymen repulsed the Confederates on each attempt before capturing the trains and guiding them away toward the Union lines. That night, Yankee soldiers amused their comrades by running the locomotives up and down the track, the whistles screaming like banshees in the dark.¹⁶⁴ The next day, April 9, 1865, Lee surrendered to Union General Ulysses Grant and the Civil War ended. After four long years, Virginia’s railroad’s ceased to participate in a cause they felt worthwhile and righteous.

¹⁶¹Robert Starobin, “Disciplining Industrial Slaves in the Old South,” *The Journal of Negro History* 53 (April 1968): 111-128.

¹⁶²OR, IV, (III), 831-839.

¹⁶³Nevins, *War For the Union*, vol. 4, 239. Under the 1864 impressment act, owners received \$25.00 per month of impressed service per slave.

¹⁶⁴Black, *Railroads*, 285-286. Union soldiers torched one of the engines in triumph and sent the remaining equipment to the offices of the United States Military Railroad in Richmond.

As Robert Black wrote, “Appomattox practically finished the career of Virginia railroads as carriers of the Confederacy.”¹⁶⁵ At the end of the Civil War, Virginia’s rail landscape resembled a junkyard. Mile after mile of iron track lay twisted and torn. Where rail had once lain, large gaps had appeared, hindering the continuation of rail service or stopping it altogether. Hundreds of locomotives sat idle while many more boxcars and freight cars waited repair. On numerous occasions, rolling stock owned by several Virginia railroads awaited destruction, their condition too far gone to warrant using valuable and scarce materials to rebuild them. In the spring, 1865, dark times settled down upon what had only four years earlier been the South’s premier rail system.

In April 1861, Virginia’s rail superintendents and company presidents started on a journey that at its end provided many valuable lessons. Men of privilege, Virginia’s rail superintendents acted with the best interests of their companies in mind. Under the conditions imposed upon them by the war, they both succeeded and failed. Several superintendents succeeded in keeping their lines in operation despite the conditions forced on them by the war. Although Virginia’s rail officers shared the ability to run large corporations, they never trusted the superintendent of another carrier. They refused to allow the interchange of rolling stock out of fear they would lose the flatcars and boxcars forever. Road company officers stood firm against adopting a standard rail gauge in Virginia. The resulting long delays caused problems with delivering goods to soldiers at the front and civilians in the cities. Consequently, transportation times and fares increased while efficiency decreased. Before the war, Virginia’s rail superintendents made a fatal mistake: they failed to look ahead to the future and to make sound business decisions based on years of experience. Not one of the superintendents or

¹⁶⁵Black, *Railroads*, 286.

presidents of Virginia's major carriers attempted to persuade the Board of Public Works to increase the number of heavy duty and high volume foundries and forges in the state. Instead, the road companies relied on northern and European suppliers. When the war began and the Union army blockaded the Southern coast, tons of important supplies of iron and railroad replacement parts remained outside the Confederacy. It should have come as no surprise to Virginia's rail officers when Tredegar Iron Works ceased to honor or accept orders from their railroads. The men who watched over the high-level operations of the Old Dominion's railroads failed to understand that the supply of iron, the very lifeblood of a carrier, could wither away at any time and that some backup replacement source must always be available. Because the supply of iron was low, railroads in Virginia did not function as viable enterprises. At the end of the war, every rail company in the state faced financial ruin.

Despite the depleted economic condition of each of Virginia's carriers in April 1865, rail superintendents and the men who assisted them came away from the war with several valuable lessons learned. Each road company officer gained extensive experience in managing and operating a railroad during war and the legacy they left for future superintendents proved invaluable. They learned lessons in time management, resource allocation under shortage conditions, and effective labor utilization when the supply of workers verged on disappearing.

Less than four months after Confederate cannons fired on Fort Sumter, railroads in Virginia moved men across the state to take part in battle. The materials transported in support of the troop movement to the battle of First Manassas in July 1861 provided lasting instruction in time management under adverse conditions. Railroad managers

learned to rebuild burned or destroyed bridges in fewer hours than before the war. Civil War railroaders in Virginia perfected commercial practices implemented during the war to meet shortages and carried these practices. Company transportation officers discovered improved methods of hauling greater quantities of goods farther and faster using a smaller number of cars and engines. Superintendents and mechanics learned how to make locomotives exceed technological limits and to remain in service for as long as possible. When the massive rebuilding of Virginia's railroads began in the spring 1865, each of Virginia's road companies had at least one operative engine. Reconstruction saw an increase in railroad jobs because men who performed road company duties during the war opted to use their new-found talents on the iron rail.¹⁶⁶ Understanding the importance of keeping Confederate lines open during the war, the country's leading railroad journal extended the equivalent of a journalistic olive branch. In January 1865, the *Scientific American* proclaimed "there is nothing more illustrative of the national energy and genius than the indomitable spirit exhibited under adverse circumstances. If in any other country than our beloved America, faction should rise and threaten national existence, the plow would stand idle in the furrow, the threads of the loom hang listless from the frames, and anvils clank only to the sharpening of swords."¹⁶⁷ The *American Railroad Journal* took up the same note of reconciliation: "We look forward to a brilliant future, when our present difficulties are settled, and to an advance in all our material interests at a rate hitherto unknown."¹⁶⁸

The Civil War forced Virginia railroad executives to think outside their normal range of day-to-day routines. Like scientists, they experimented and tested theories. At

¹⁶⁶Nevins, *War For the Union*, vol. 4, "The Organized War," 385.

¹⁶⁷*The Scientific American*, January 2, 1865, 22.

times, they succeeded while other times they failed. In the end, however, the contributions and sacrifices these men and their employees made to the advancement of railroading set the stage for the future and the success of rail operations not just in Virginia but in the United States.

¹⁶⁸ *American Railroad Journal*, January 7, 1865, 58.

CHAPTER IV

THE BALTIMORE & OHIO RAILROAD: A CASE STUDY

When the vote came, Virginians split on the secession issue. In April 1861, delegates from Virginia's central, southeastern, and southwestern regions voted to secede from the Union and to join the Confederacy. Representatives from the northwestern counties, however, particularly those located in the northern, or lower Shenandoah Valley, elected to support the North. Across Berkeley, Hampshire, Hardy, Jefferson, and Morgan Counties, a strong Unionist sentiment existed, in direct opposition to the pro-Confederate stance taken by the majority of Virginia's eastern, slave-holding counties. Despite their political posture, each region in Virginia received services from one of the state's primary railroads. East of the Blue Ridge and Allegheny Mountains, carriers such as the Virginia Central, the Orange & Alexandria, the Seaboard & Roanoke, and the Virginia & Tennessee provided rail support to the populations of the Shenandoah Valley, the tidewater region, and the area running westward from Norfolk to Lynchburg. In northwest Virginia, the Baltimore & Ohio Railroad served as the principal road company providing employment, goods delivery, and passenger transportation.

This chapter on the Baltimore & Ohio Railroad is a case study of the only Civil War carrier that maintained close ties with people in both a Confederate and a Union state. Although not a southern-based railroad, the B&O passed through Maryland, a

divided border- state, and Virginia, a state divided in its loyalties to the Union and the Confederacy. As the line made its way from Baltimore, Maryland, to Wheeling, Virginia, the B&O passed through regions that received protection from the Union Army. Along the B&O's path, particularly where it crossed the Potomac River into Virginia, the line employed hundreds of Virginians as the primary rail service provider in the region. No other link with Baltimore's harbors or the Ohio River existed in the area. When Confederate forces uprooted track, stole and damaged locomotives and rolling stock, and burned bridges and spans across the many creeks and ravines in the area, it became a case of Virginians against Virginians. The people of the lower Shenandoah Valley had depended on the B&O since the mid-1830s and the loyalty they displayed toward the carrier guided their decision to remain with the Union in 1861. Where Virginia's Confederate railroads accepted defeat at the hands of the Confederate government and the Union army, the Baltimore & Ohio's employees, executives, and company officers chose to keep their line in operation at all costs during the Civil War. Decisions made by the Baltimore & Ohio Railroad's superintendent during the war caused the B&O to survive the conflict in better financial and physical condition than Virginia's railroads.

Tall, copper-hulled ships from Amsterdam, Liverpool, LeHavre, Savannah, Georgia, and Boston, Massachusetts, lined Baltimore's harbor in 1825 when a board of inquiry met to discuss finding a method of extending the city's economic reach deeper into the western regions beyond the Appalachian Mountains. Located on the National Road's eastern terminus, Baltimore competed with New York's Erie Canal for trade in the Great Lakes region. In 1827, a panel consisting of city leaders commissioned civil engineers to estimate the cost of linking Baltimore with the Chesapeake & Ohio Canal

near Washington, D. C. When cost projections exceeded \$22 million for a forty-mile connecting canal to the C&O, the panel elected to investigate other, less costly methods of reaching the west. Since 1801, news from England told of machines that ran on iron or wooden tracks and pulled heavy loads over extended distances.¹ Historian James Dilts write that Baltimore, “then the nation’s fourth largest city after New York, Philadelphia, and Boston, adopted the railroad. When it began, three years later, it became, as it turned out, the first planned, long-distance general purpose railroad in the world.”²

To reach the Ohio River required building a railroad ten times longer than any American railroad in existence in 1828. Appalachian peaks in excess of 3,000 feet, wide rivers, and deep ravines stood between completion of the link from Baltimore to Wheeling. “It was an amazing intellectual step,” wrote historian James Dilts, “no less daring because it was desperate.”³ Along the way to Wheeling, the B&O passed through Harpers Ferry, Virginia, where it bridged the Potomac River and ran southwestward to the Ohio River Valley. At Harpers Ferry, farmers from the agriculturally rich Shenandoah Valley placed their produce on B&O cars for delivery to markets east of the Appalachian Mountains and west cities along the Ohio River. Martinsburg and Wheeling, Virginia, became major depots as the B&O established marshalling yards and maintenance facilities at intervals along the track.

¹William Prescott Smith, *A History and Description of the Baltimore and Ohio Railroad* (Baltimore: John Murphy, 1853), 10. William Smith worked on the B&O as a master of transportation during 1860-1866; John E. Clark, *Railroads in the Civil War: The Impact of Management on Victory and Defeat* (Baton Rouge: Louisiana State University Press, 2001), 7; Eugene Alvarez, *Travel on Southern Antebellum Railroads, 1828-1860* (University, Alabama: The University of Alabama Press, 1974), 5.

²James D. Dilts, *The Great Road: The Building of the Baltimore & Ohio, the Nation’s First Railroad, 1828-1855* (Stanford: Stanford University Press, 1993), 26; Smith, *A History and Description of the Baltimore and Ohio Railroad*, 18, 21. The state of Maryland purchased \$500,000 of company stock while additional funds came from city and state funds, as well as private stockholders for a total in excess of \$4 million. The B&O Board of Directors consisted of representatives from the stockholders, the city of Baltimore, and the state of Maryland.

Like Virginia's railroads, the B&O hired the cheapest available labor. Thousands of poor, illiterate Irish immigrants flocked to the B&O for the financial opportunities working for the railroad afforded them. In the 1840s, the common railroad worker earned between fifty and seventy-five cents per day, with an increase to an average of eighty-five cents per day by 1860.⁴ The B&O also hired slaves, but only sparingly and never after 1831.⁵ Slaves hired from Maryland plantations labored alongside Irish and German workers, but in smaller numbers than those found working on Virginia's railroads.

From its inception in 1828, the B&O strove to offer its customers the best equipment available in railroad technology. By 1860, fast locomotives and more comfortable cars offered passengers greater space and a more pleasant ride.⁶ Between 1847-1848, the B&O spent more than \$600,000 on roadbed improvement, the reduction of sharp, unsafe turns, and the installation of heavier, more durable rail.⁷ To ensure a safer ride, the B&O replaced the light, fifteen-pound strap rail commonly found on most Maryland and Virginia railroads with the heavier and more durable fifty-pound iron rail, forged at local ironworks.⁸ Purchasing rails from local foundries allowed the B&O to keep construction and maintenance costs to a minimum. Additionally, using locally

³Dilts, *The Great Road*, 26.

⁴John F. Stover, *History of the Baltimore & Ohio Railroad* (West Lafayette, Indiana: Purdue University Press, 1987), 13. Although Irish immigrants gained a reputation as excellent workers, they also brought feuds and secret societies with them from Ireland. Workers born in Ulster fought with laborers from County Cork while Connaught men battled the Longfords, their rivals from Ireland's midlands; Dilts, *The Great Road*, 134. Dilts described the Irish workers as "garrulous drinkers [and] vicious fighters who built turnpikes, canals, and railroads across half a continent . . . they were genuine wild men."

⁵Theodore Kornweibel, Jr., "Railroads and Slavery," *Railroad History* 192 (Fall-Winter 2003): 34-59; Dilts, *The Great Road*, 133. Section leaders noted the Irish worker's dislike for working alongside the Blacks. As Dilts pointed out, "when the Irish were not fighting among themselves, they took on the Negroes, their major competitors in the labor market, who fully reciprocated their hatred and contempt."

⁶Alvarez, *Travel on Southern Antebellum Railroads*, 48.

⁷Stover, *History of the Baltimore & Ohio Railroad*, 76.

⁸*Ibid.*

made iron rail allowed the B&O to deliver replacement rails to repair crews in less time than their Virginia counterparts.

The Virginia General Assembly created the state's formal attachment with the Baltimore & Ohio Railroad. In 1847, the Virginia legislature passed an act authorizing the B&O to extend its line to Wheeling with the company's western terminus located at Fish Creek on the Ohio River. The same act extended the B&O's Virginia charter for an additional fifteen years.⁹ The B&O maintained company headquarters in Baltimore but Maryland and Virginia shared the benefit of having a railroad run across state- and privately-owned land. The B&O hired workers in Virginia to work alongside the men it brought from Baltimore. As the railroad continued to prove its economic value south of the Potomac River, Virginians in northwest Virginia created a strong economic bond between themselves and the B&O. In 1844, when the B&O's board of directors elected Virginia-born Thomas Swann as company president, the identification between the carrier and the people strengthened. The editor of the Winchester, Virginia, *Republican* newspaper reported that as a Virginian, Swann understood the importance of using the B&O to foster closer economic ties between the company and the residents of the lower Shenandoah Valley.¹⁰ During Swann's tenure, the B&O increased its track mileage as well as its national stature. By the mid-1850s, the B&O owned seventy-six locomotives, two thousand freight cars, and in excess of one hundred passenger cars.¹¹ In 1858,

⁹Dilts, *The Great Road*, 326-327.

¹⁰Stover, *History of the Baltimore & Ohio Railroad*, 65, 81. Like many of Virginia's railroad superintendents, Thomas Swann was descended from some of Virginia's first families. His mother was directly descended from the colonial Byrds. Swann studied the law at the University of Virginia and spent his summers on a 1,200-acre estate near Leesburg, Virginia. A slaveholder, Swann freed his slaves before the Civil War. Realizing the economic importance of having B&O track cross Virginia counties, in 1851, Swann managed to convince the Virginia General Assembly to provide funds for a branch railroad leading from the Potomac River to the mouth of Three Forks Creek near Parkersburg, Virginia.

¹¹Stover, *History of the Baltimore & Ohio Railroad*, 77.

Swann resigned and the B&O's board of directors elected John Work Garrett as the new company president. As the leading American railroad and under the guidance of a strong company president, the B&O entered the 1860s on strong financial ground.

James Dilts described John Garrett as "the Baltimore and Ohio's greatest president and its dominating force during the Civil War."¹² Another historian, Edward Hungerford, characterized Garrett as "resourceful, in every way an executive. Even in minute detail, Mr. Garrett was not found to be lacking an interest. For the smallest detail in the operation of the Baltimore and Ohio was not beneath the attention of its president."¹³ Garrett implemented company-wide safety procedures, published safety manuals, and, most importantly for the workers, created procedures designed to reduce the number of lost man-hours resulting from injuries or fatalities.¹⁴ Garrett's primary focus, however, remained on producing revenue. By 1860, Garrett turned the B&O into the longest railroad in the United States with more than 500 miles of track, 236 locomotives, more than 3,400 freight cars, and \$30 million in company assets.¹⁵

At the beginning of the conflict, the North and the South each claimed the Baltimore & Ohio Railroad as their own. The B&O presented two equally important problems to the Union and the Confederacy. Jefferson Davis and the Confederate government needed the B&O's track in northwestern Virginia in order to prevent the capture of strategically important Harpers Ferry. Controlling the B&O and the Potomac River to Harpers Ferry secured western Virginia from Union occupation. For the Union,

¹²Dilts, *The Great Road*, 399.

¹³Edward Hungerford, *The Story of the Baltimore & Ohio Railroad* 2 vols., (New York: G. P. Putnam's Sons, 1928), II:26.

¹⁴Stover, *History of the Baltimore & Ohio*, 96. Garrett required that all locomotives display a "red flag by day and a lantern by night." Slogans painted on B&O workshop walls encouraged workers to "in all cases, take the side of safety."

maintaining possession of the B&O prevented the Confederates from commanding a single mile of track on the single major railroad north or west of the Appalachian Mountains. Understanding the urgency of the situation, the Union Army placed soldiers at several stations along the B&O's line in spring 1861. Pro-Southern historian Douglas Southall Freeman wrote "from the very hour of secession, the Federals realized that the Baltimore and Ohio Railroad between Washington and Parkersburg [Virginia] was at once the most important and the most exposed link in the iron chain that bound together the East and the Midwest. Not only must the railroad be held but also it must be free to operate without the threat of raids."¹⁶ Historian Edward L. Ayers explained that the region "contained the largest concentration of Southern Unionist accessible to Northern aid and support."¹⁷ Another historian, Edward H. Phillips, explained that Unionism existed in the area at more pronounced levels west and northward of the mountains, particularly in those counties and towns where the B&O had existed for many years.¹⁸ The citizenry of northwestern Virginia placed such a high value on the B&O that they were willing to allow the fate of the railroad to determine their allegiance to the North or to the South.¹⁹ When it became evident to the populations of Berkeley, Hampshire, Hardy, Jefferson, and Morgan Counties that the Confederacy determined to destroy rather than capture the B&O, "their alienation from Virginia and the Confederacy was well

¹⁵Robert G. Tanner, *Stonewall in the Valley: Thomas J. "Stonewall" Jackson's Shenandoah Valley Campaign, Spring 1862* (Garden City, New York: Doubleday & Company, 1976), 22.

¹⁶Douglas Southall Freeman, *Lee's Lieutenants: A study in Command* 3 vols., (New York: Charles Scribner's Sons, 1944), I: 691.

¹⁷Edward L. Ayers, *In the Presence of Mine Enemies: War in the Heart of America, 1859-1863* (New York: W. W. Norton & Company, 2003), 181.

¹⁸Edward H. Phillips, *The Lower Shenandoah Valley in the Civil War: The Impact of War Upon the Civilian Population and Upon Civil Institutions* (Lynchburg, Virginia: H. E. Howard, 1993), 38.

¹⁹Phillips, *The Lower Shenandoah Valley in the Civil War*, 43.

under way.”²⁰ Not everyone in the lower Valley or the western counties felt an attachment to the Union, however. In a letter to Jefferson Davis in September 1861, several citizens of Hardy County called for Confederate soldiers to protect their property. “Our cattle, sheep, and horses to the amount of \$30,000,” the letter stated, “have been forcibly taken from us and appropriated to the support of the Army of the United States.”²¹ In the late fall, 1861, Union General George B. McClellan placed 20,000 Federal soldiers in western Virginia to protect the B&O and to preserve the Unionist sentiment of the lower Valley.²² While the Union and the Confederacy battled over possession of the Baltimore & Ohio railroad, John Garrett realized that he too had decisions to make.

From the day he assumed the presidency of the railroad, John Garrett spoke of the Baltimore & Ohio Railroad as a Southern carrier. Longtime Southern Democrats, the Garrett family watched the rise of the Republican Party and Abraham Lincoln with discomfort.²³ Garrett made no secret of his affinity for the South and often referred to Confederate leaders as his “Southern friends.”²⁴ Despite his sympathies, Garrett realized the B&O’s future prosperity lay with the North, and ultimately, with the Union.²⁵ For more than fifty years, the commercial life of the B&O rested on supplying northern factories with coal from western Virginia and with transporting western-made goods to

²⁰Ibid. A letter to West Virginia Governor Francis Harrison Pierpont made clear that the people of Morgan County wanted “the whole state preserved for its integrity, but if it is to be divided between the U. S. and the C. S. we must go with the party that holds the B&O.R.R.”

²¹*The War of the Rebellion: The Official Records of the Union and Confederate Armies*, 128 volumes (Washington, D. D. 1899), I, (V), 845-846. Hereafter cited as *OR*.

²²Ayers, *In the Presence of Mine Enemies*, 182.

²³Stover, *History of the Baltimore & Ohio*, 101.

²⁴Hungerford, *The Story of the Baltimore & Ohio Railroad*, II: 350.

²⁵Clark, *Railroads in the Civil War*, 32; Stover, *History of the Baltimore & Ohio*, 101.

east coast ports. When the Union called, John Garrett answered with his full support. In 1861, the Baltimore & Ohio Railroad stayed in the Union.

Despite Garrett's decision to support the Union, he and the B&O came under suspicion by the governments of the United States and the Confederacy for aiding the enemy. In April 1861, Garrett received an anonymous letter stating that pro-Confederate Marylanders promised to destroy track, burn bridges, and demolish company buildings if the B&O transported Union soldiers.²⁶ Within a week, Garrett read an editorial in the Pro-Union, Wheeling *Intelligence* newspaper criticizing his willingness to transport Confederate soldiers from western Maryland and Virginia.²⁷ Secretary of War Simon Cameron, a Pennsylvania Republican who possessed a large number of shares in the rival Northern Central Railroad, informed Garrett that carrying Confederate soldiers constituted a treasonable act.²⁸ Historian John Stover wrote that when General Benjamin Butler arrested several of Baltimore's Confederate supporters, "more citizens of [Baltimore] forgot their secessionist fervor, and most businessmen remembered that their commercial and financial ties were really with the North."²⁹ Geography certainly played a role in Garrett's decision to support the North. Baltimore's north-central location precluded the B&O from supporting the Confederacy at any level. Had he chosen to willingly surrender any portion of the B&O to the Confederacy, Garrett would have faced arrest and removal from his position as president of the company.

In Virginia, Civil War railroad superintendents battled with the Confederate Congress over control of their lines. Issues such as track gauge, hauling rates,

²⁶Stover, *History of the Baltimore & Ohio*, 102.

²⁷Ibid.

²⁸Ibid.

²⁹Stover, *History of the Baltimore & Ohio*, 104.

conscription, and the availability of precious materials clouded the relationship between the carrier executives and the Virginia House of Representatives and Senate. In the North, however, railroad superintendents enjoyed a better relationship with the government than their Confederate counterparts. In January 1862, the United States Congress passed a bill providing President Abraham Lincoln with the authority to “take over all railroads as necessary for the successful operation of the war.”³⁰ Unlike Jefferson Davis and the Confederate railroads, Lincoln never enacted the authority to seize the railroads because he did not have to. Northern railroad superintendents and presidents enjoyed more compatible relationships with their government than the carrier officers of the South. A belief existed in the North, however, that railway employees presented a threat to the security of their companies. All Northern railroad employees came under this suspicion, particularly those who worked for the B&O and who came into periodic contact with Confederate sympathizers and soldiers. Union General Thayer Melvin, commander of the Cumberland Railroad District, received no objections from John Garrett or William Smith when he required all northern railroad workers to swear an oath of allegiance to the United States.³¹ Garrett informed his workers that failure to take the oath guaranteed termination of employment. Still, the United States government continued to keep a close watch on Garrett and his actions at the B&O. The pressure on

³⁰Robert E. Riegel, “Federal Operation of Southern Railroads During the Civil War,” *The Mississippi Valley Historical Review* 2 (September 1922): 126-138. The bill authorized Congress to assume the control of northern railroads as well as any Confederate railroad captured during the war. Congress never enacted the bill except in the case of controlling several small Pennsylvania railroads for a limited duration at the time of the battle of Gettysburg.

³¹William E. Bain, ed., *The B&O in the Civil War: From the Papers of William Prescott Smith* (Denver: Sage Books, 1966), 39. B&O employees, just as employees on other Northern railroads, took the following oath: “I do solemnly swear before Almighty God, that I will bear true allegiance to the United States of America, and support its Constitution; that I will at no time and in no wise aid or abet, by counsel or act, directly or indirectly, any of the enemies of said Government; but that I will at all times conduct myself as a

the B&O eased when Edwin M. Stanton replaced Simon Cameron as the Secretary of War. Stanton and the War Department took a greater interest in the difficulties the B&O experienced as a result of continual Confederate raids upon the line. By March 1862, with assistance from the Secretary of War and the Union Army, the B&O's Main Stem, that portion of the line running from Baltimore to Wheeling, reopened after a prolonged period of interrupted service.³² Unlike Simon Cameron, Edwin Stanton did not allow his interests in a competing railroad to cloud his judgement in terms of the B&O's value to the Union.

The Baltimore & Ohio competed with other northern railroads for business. The New York Central, the Pennsylvania Central, and the Erie Railroad competed with the Baltimore & Ohio for western trade, for hauling freight, and for government contracts.³³ Like Confederate road company executives, representatives from each northern line met regularly to discuss rates. Furthermore, as with Virginia's rail superintendents, their meetings resulted in little or no progress made on uniform rate schedules of hauling charges. As Hungerford wrote, "they would make agreements, and then promptly break them. They were a court without the authority to enforce its [own] laws."³⁴

Between April 1861 and February 1862, the B&O charged the United States government 3.7 cents per mile to transport troops and freight charges of between five and eight cents per ton-mile, rates that compared favorably to other northern railroads for the same period.³⁵ As in Virginia, wartime inflation affected transportation rates with the

peaceful, loyal, and obedient subject of the same, and faithfully discharge my duties as its law abiding citizen; all of which I wear of my free will and accord; so help me God."

³²Ibid.

³³Hungerford, *The Story of the Baltimore & Ohio Railroad*, II: 40. Hungerford reported that each railroad changed its fees so often from one week to the next that little constancy existed in overall rate schedules.

³⁴Ibid.

³⁵Stover, *History of the Baltimore & Ohio*, 117.

general trend indicating periodic increases for hauling material and for transporting troops. The difference between the inflation rate in Virginia and that in Maryland, however, rested on the strength of the currency. As the war progressed and materials became less available throughout Virginia, the value of the Confederate dollar dropped steadily. Northern currency, on the other hand, remained strong through the course of the conflict. The Confederacy and the Union experienced inflation because of the war, but the rate of climb in the North did not match that of the South. Northern factories worked around the clock to produce the goods necessary to conduct the war. The short supply and high demand for goods common in the Confederacy had a less adverse effect on the industrial north.

Although the Baltimore & Ohio served the Union throughout the Civil War, the task was not always easy. On April 19 1861, six days after Fort Sumter surrendered, President Lincoln's called for 75,000 volunteers to fill the Union Army. Although the populations of Baltimore and surrounding communities held strong sympathies for the South, the state of Maryland never seceded. As one of four border states, Maryland's citizens watched as men rushed to join either the Confederate or the Union armies. When word spread across Baltimore that the B&O planned to transport soldiers from the Sixth Massachusetts Infantry through the city, pro-Southern sympathizers protested to Mayor George W. Brown and Governor Thomas H. Hicks.³⁶ John Garrett received a note from the Mayor of Charles Town, Virginia, that in the event the B&O transported the Sixth Massachusetts over its Main Stem, then Virginia militia stationed near Charles Town planned to destroy the carrier's bridges at Harpers Ferry. As Hungerford wrote, Garrett

³⁶Hungerford, *The Story of the Baltimore & Ohio Railroad*, II: 359.

made an “instant and indignant refusal to entertain such a proposition.”³⁷ Arriving in Baltimore on cars belonging to the Philadelphia, Wilmington and Baltimore Railroad, the Sixth Massachusetts made its way across Baltimore to Camdem Station, the B&O’s main terminal in the city.³⁸ Followed by a pro-Southern, rock-throwing mob that increased in size as the soldiers neared Camdem Station, the situation became increasingly tense. Outside the station, shots rang out. By the time the firing ceased, nine civilians and four soldiers lay dead along with dozens more wounded or injured.³⁹ After fighting their way through the crowd, the Sixth Massachusetts boarded waiting B&O cars and made their way to Washington.⁴⁰ To prevent further outbreaks of violence, B&O President Garrett and Mayor Brown suspended rail operations in and around Baltimore for three days. For several weeks after April 19, Union troops entered Washington via Chesapeake Bay steamers and the railhead at Annapolis.⁴¹ Garrett and his carrier weathered the storm created by the pro-Southern mob, but the carrier had not reached the end of its relationship with the Confederacy. At Harpers Ferry, “Stonewall” Jackson waited for the right moment to spring a trap on the B&O.

Until his death in May 1863, “Stonewall” Jackson proved to be the B&O’s worst nemesis. In April 1861, Confederate forces under Jackson occupied Harpers Ferry, located at the mouth of the Potomac River. Through an agreement with the Confederate government, B&O trains carrying coal on the double tracks leading from Wheeling to Baltimore on the Main Stem passed unmolested by Confederate soldiers through Harpers

³⁷Ibid.

³⁸Stover, *The History of the Baltimore & Ohio*, 102.

³⁹Stover, *The History of the Baltimore & Ohio*, 104; Hungerford, *The Story of the Baltimore & Ohio Railroad*, II: 364.

⁴⁰Hungerford, *The Story of the Baltimore & Ohio Railroad*, II: 364.

⁴¹Ibid.

Ferry. Jackson realized the coal passing through his area powered northern industries and he also knew Virginia's railroads suffered shortages in rolling stock and engines.

Historian John Waugh wrote that Jackson "suffered and endured. By late May, however, he was through doing both."⁴² Through a series of letters to John Garrett, Jackson convinced the B&O President to restrict the carrier's nighttime traffic to regularly scheduled passenger and express trains that ran only during daylight hours.⁴³ Several days later, Jackson sent Garrett another request: Could the B&O, Jackson asked, further restrict its daytime traffic through the Harpers Ferry area to a two-hour corridor in order to prevent interference with routine training conducted by Confederate troops? Again, Garrett complied with Jackson's request. On May 23 1861, the same day Virginia seceded from the Union, Jackson sprang his trap on the B&O. He ordered Confederate officers at Point of Rocks, Maryland, and Martinsburg, Virginia, a distance of thirty-one miles, to capture all railroad equipment running between these two points. The Confederates captured fifty-six locomotives and more than 300 freight cars in less than two hours.⁴⁴ Jackson sent the captured equipment south along the Valley Pike and on rails belonging to several of Virginia's railroads.⁴⁵ Jackson's "Stonewall Brigade"

⁴²John C. Waugh, *The Class of 1846: From West Point to Appomattox: Stonewall Jackson, George McClellan, and Their Brothers* (New York: Warner Books, 1994), 237.

⁴³Waugh, *The Class of 1846*, 237; Stover, *History of the Baltimore & Ohio Railroad*, 104. Garrett knew the Virginia General Assembly had yet to vote on the secession issue. Until the Assembly made that decision, Garrett realized the uncertain position in which the B&O ran through northern Virginia. Garrett complied with Jackson's request and ordered B&O engineers to operate their trains during daylight hours only.

⁴⁴Waugh, *The Class of 1846*, 239.

⁴⁵Hungerford, *The Story of the Baltimore & Ohio Railroad*, II: 7. Getting the multi-ton engines to Virginia's depots required testing some of the brightest minds in the Confederacy. The northern terminus of the Valley Pike lay twenty-five miles from Harpers Ferry at Winchester. Confederate soldiers and engineers removed boilers, plates, and other heavy attachments to decrease the engine's weight. Teams of draught horses pulled the locomotives along roads until they reached the Valley Pike. Once there, the soldiers reassembled the engines and placed them on tracks belonging to the Manassas Gap Railroad which connected with the Orange & Alexandria. Jackson sent one engine to repair shops in Raleigh, North

continued to harass the carrier throughout the summer of 1861. By the end of August, Jackson's soldiers wreaked enough havoc and destruction on the B&O to cause the company to cease operations on the Main Stem for more than ten months.⁴⁶ The abuse inflicted on the B&O by Jackson caused two events to occur. In northwest Virginia, Virginians who worked for the B&O viewed Jackson's actions as an affront from a fellow Virginian. In Baltimore, John Garrett, also a Virginian, began to view the Confederate army as a rebel army determined to do nothing more than destroy personal property. Like the Virginians located along Jackson's path of destruction, Garrett too felt as though he had been slapped in the face.

In September 1863, the Baltimore & Ohio played a leading role in the longest deployment by rail of soldiers from one theatre of operations to another. In early September, Confederate General Braxton Bragg defeated Union General William Rosecrans at the battle of Chickamauga in northwest Georgia. Secretary of War Stanton realized that the loss at Chickamauga threatened the safety of the Union stronghold at Chattanooga, Tennessee. To lose Chattanooga also meant the loss of valuable copper and nitre deposits.⁴⁷ Stanton also believed the strong pro-Unionist sentiment in east Tennessee needed protecting. On September 24, Stanton convened a meeting at the War Department to discuss methods of moving the approximately 25,000 men of the Union 11th and 12th Corps to Chattanooga to reinforce Rosecrans. President Lincoln, Secretary of the Treasury Salmon P. Chase, Secretary of State William Seward, General in Chief

Carolina where it went through refitting before being renamed the *Lady Davis* in honor of Varina Davis, the wife of Confederate President Jefferson Davis.

⁴⁶Stover, *History of the Baltimore & Ohio*, 105. Stover reported that the B&O's 1861 annual report indicated the loss of twenty-six bridges, 127 spans totaling more than 4,000 feet in length, and more than 100 miles of telegraph wire cut and sent to Confederate telegraph stations.

⁴⁷Hungerford, *The Story of the Baltimore & Ohio Railroad*, II: 46; Clark, *Railroads in the Civil War*, 146.

Henry Halleck, and Colonel Daniel C. McCallum, chief of the United States Military Railroads attended the meeting.⁴⁸ After several hours of discussion and debate, Stanton stated he believed the two corps needed no more than five days to travel by rail the 1,200 miles from northern Virginia to Chattanooga.⁴⁹ Orders went out the next morning. Riding on cars belonging to the B&O, the 11th and 12th Corps traveled to Wheeling, Virginia, where they disembarked the cars and crossed the Ohio River on pontoon boats. Once across the river, the soldiers boarded trains belonging to several other northern railroads for the trip to Chattanooga.⁵⁰ When the last of the thirty trains consisting of more than 700 cars arrived in Chattanooga, only eight days had elapsed since John Garrett and Edwin Stanton turned the idea into reality.⁵¹ Because of Garrett's role in arranging the speedy transportation of the soldiers, Chattanooga remained in Union hands for the remainder of the war.

The Civil War brought prosperity to the Baltimore & Ohio Railroad and allowed John Garrett to look to the postwar years with great confidence. Stover reported that "passenger and freight revenue greatly increased between 1861 and 1865, [with] passenger receipts increasing more than fourfold in the four years and freight revenue climbing nearly threefold."⁵² In 1863 when the tide of the war turned in favor of the Union, the northwest and far western counties of Virginia, estranged from the eastern and central counties since 1861, entered the Union as the state of West Virginia. The

⁴⁸Clark, *Railroads in the Civil War*, 147. Other than the President, Stanton asked each participant to predict the length of time needed to conduct the rail movement. Responses varied from Halleck's estimate of sixty days to fifteen days offered by Major Thomas E. Eckert of the United States Telegraph.

⁴⁹Clark, *Railroads in the Civil War*, 147; Hungerford, *The Story of the Baltimore & Ohio Railroad*, II: 48.

⁵⁰Stover, *History of the Baltimore & Ohio*, 111. Cars belonging to the Ohio central carried the men through Columbus, Ohio, Indianapolis, Indiana, and to Louisville, Kentucky. From Louisville, the soldiers rode on cars belonging to the Louisville and Nashville to Chattanooga.

⁵¹Clark, *Railroads in the Civil War*, 198.

⁵²Stover, *History of the Baltimore & Ohio*, 115.

population along the Potomac River and in cities such as Wheeling and Martinsburg solidified their relationship with the B&O as the carrier proved that it fully supported the Union. During 1863, the B&O showed its first profits from supporting the Union, a trend that continued until well after the war. Where 1861 receipts indicated profits in excess of \$1 million, 1865 receipts showed a net profit of more than \$4 million.⁵³ Dividends of six percent in 1861, 1862, and 1863 increased to seven percent in 1864 and to eight percent in 1865.⁵⁴ President Garrett, however, knew the danger of resting on the company's laurels after the war and he set out to ensure the company did not face a situation it could not handle. In the B&O's 1865 annual statement, Garrett's comments regarding the B&O's role in the Civil War bordered more on understatement than boasting. In simple terms, Garrett recognized the board of director's appreciation for the efforts put forth by the men who kept the B&O in operation during the Civil War.

The Board again acknowledge with satisfaction their appreciation for the vigor, skill, and fidelity of the officers and men in each department of the service, by which the business of the Company was successfully conducted during periods of frequent danger and embarrassment.⁵⁵

John Garrett summed up four years of back-breaking work, success and failures, suffering and pain, and ultimate victory in a manner that befitted the man and his railroad: unpretentious, to the point, and focused.

Many differences existed between the B&O and Virginia's railroads in 1865. While most of Virginia's carriers lay in or near physical and financial ruin, the Baltimore & Ohio experienced sound economic times. No material shortages existed in the shops

⁵³Ibid.

⁵⁴Stover, *History of the Baltimore & Ohio*, 115-116. Much of the increase came as the result of a thirty percent stock dividend in 1862 coupled with security investments made by Garrett during the war.

and employees valued their jobs. Union veterans returning from the war sought employment with the B&O because, as in the South, working for the railroad provided a steady and adequate income. Repairmen and carpenters erected new bridges and spans in less time than before 1861, a skill acquired during the war when destruction caused by Confederate soldiers required getting the line back in operation as soon as possible. Accordingly, the number of postwar track miles increased as rail installers displayed the talents obtained while working for the B&O from 1861-1865. Using the skills they learned from moving the 11th and 12 Corps to Tennessee, mid- and senior-level managers practiced more effective methods of time, personnel, and material management while moving freight and passengers over longer distances and in shorter amounts of time. Coordination for services and the interchange of cars between railroads improved between the B&O and northern railroads, the result of exchanging rolling stock during the war. Although not always a pleasant experience, the B&O's senior staff officers learned how to negotiate contracts with the federal government. In a move that exemplified the B&O's place in future American railroad operations, the carrier established the first commuter train in the United States. During the Civil War, housing shortages in Washington forced government employees to seek homes and apartments as far away as Baltimore. The B&O created a special train to handle the sudden influx of people who made the daily trek from Baltimore to the nation's capital, a practice that continues today.⁵⁶

⁵⁵Stover, *History of the Baltimore & Ohio*, 118.

⁵⁶Hungerford, *The Story of the Baltimore & Ohio Railroad*, II: 44. Early in the commuter train's existence, passengers paid a flat rate of \$200 per year to ride any train between Baltimore and Washington. Garrett reduced the fare to \$125 per year when he concluded that the original ticket price exceeded the income level of many government workers. Commuter trains departed Camden Station daily at 7:10 a.m. and arrived in Washington at 8:10 a.m. The train returned to Camden Station at 4:30 p.m. each afternoon.

In 1860, the people of northwest Virginia chose to remain with the Union because they held strong convictions against slavery. They also realized the economic impact brought to their lives by the Baltimore & Ohio Railroad. In the counties crossed by B&O track, the citizens understood the value of a railroad more than their eastern Virginia counterparts. The people of Virginia's northwest corner were simply unwilling to give up the railroad that played a large role in their daily lives. They made clear choices to remain with the Union because they understood the importance of logistics, not just to the Union Army, but to the civilian populations as well. Without the B&O Railroad, the people living along the railroad's path would have suffered the same material shortages as the rest of Confederate Virginia. As long as the B&O remained in operation, any shortages they experienced were of short duration.

Unlike Virginia's railroads after 1865, the B&O faced a more positive economic future. While the B&O lost numerous engines and rolling stock to Confederate destruction or capture, the amount of equipment lost to the enemy did not rise to that experienced by Virginia's Confederate carriers. During the Civil War, Virginia's rail superintendents found it difficult to adhere to railroad laws. Conversely, John Garrett worked willingly with the United States government to broaden the Union war effort. Working with private policy makers, the United States Military Railroads, and with President Lincoln, Garrett showed that he understood the necessity of keeping the B&O open under the most trying conditions. Where Northerners accused him of harboring Southern sympathies, Garrett proved his allegiance to the Union by providing unlimited support in the move of two corps to Chattanooga. His ability to cooperate with presidents of other railroads contrasted that of Virginia's rail superintendents. Unlike Virginia's rail

superintendents during the war, Garrett exhibited organization, a contributing factor in the success of Union rail operations. John Garrett made tough choices during the war resulting in high financial payoffs, increased dividends, customer confidence, and welcome levels of future business. Where Virginia carriers such as the Virginia Central, the Seaboard & Roanoke, or the Virginia & Tennessee required years to regain a strong financial footing after the war, the B&O needed only to carry on as the nation's premier railroad.

CHAPTER V

VIRGINIA'S RAILROADS FAIL TO MEET CIVIL WAR NEEDS

The Civil War ended in April 1865 and parts of the South lay broken. Numerous factors can be attributed to the Confederacy's defeat ranging from the South's inability to match the North's endless manpower reserves to the southern states' lack of industry. In Virginia, where more major battles occurred than in any other Confederate state, miles of trenches, torn roads, burned buildings, and wrecked cities scarred several regions of the state. The pride of Southern railroads before the war, Virginia's road companies sat silent in the spring of 1865. Across the state, locomotives sat idle, their tenders and fireboxes cold, the rolling stock they pulled resembling junk set atop worn iron wheels. Everywhere in Virginia, track lay uprooted and twisted. Railroad superintendents and their station managers found it difficult to determine what remained of company equipment.

Noted railroad historian Robert C. Black wrote "railroads formed the backbone of the southern apparatus of supply and communication just as they have done in the continental phase of every American war effort since."¹ Contemporary historian John Clark agreed with Black. Clark explained that new technology such as railroads, along with the increasing importance of logistics, "combined with the war's reckless waste and insatiable appetite for food, material and equipment, and especially human lives, advance

the arguments of those who define the Civil War as the first modern war.”² For the first time in American history, railroads delivered men to battle. Railroads increased a community’s dependence on goods brought from outside the region, and they allowed for communication over extended distances. Government leaders and senior road company officers, however, did not understand in 1861 the management principles required to operate a railroad in a time of war. In Virginia, after but one year of the war, railroad superintendents and military officers realized the importance of mobility and the need to deliver men and materials quickly and efficiently to the battle areas. Railroads took on strategic as well as logistical importance and, as historian George Turner wrote, “campaigns were planned and conducted for the primary purpose of capturing or destroying railroad lines of particular value to the enemy. As each successive year ended, it became increasingly apparent that the side which controlled the railroads held a tremendous advantage.”³

To offer conclusions on Virginia’s railroads during the Civil War era it is important to examine the issues that affected the individual carrier’s ability to meet wartime goals. The lack of natural and railroad-related resources influenced the road companies and determined whether each carrier survived the war. Neither the Virginia legislature nor the Confederate government understood the true nature of railroad logistics. Throughout Virginia, too many gaps in the lines and differences in gauges slowed the transfer of goods and the prompt delivery of men to military staging areas. Early in the war, Virginia’s rail superintendents had the opportunity to correct the

¹Robert C. Black, *Railroads of the Confederacy* (Chapel Hill: University of North Carolina Press, 1952), 294.

²John E. Clark, *Railroads in the Civil War: The Impact of Management on Victory and Defeat* (Baton Rouge: Louisiana State University press, 2001), 3.

problems associated with breaks in the line. Instead, they failed to display sound judgement and the Confederate war effort in Virginia suffered.

During a time of national conflict, leadership rises in importance and becomes essential to the successful operation of all institutions that support a country's war effort. In Virginia, civilian railroad superintendents failed to lead their companies in a manner that indicated their willingness to support the Confederacy as much as possible. During those times when the war required they devote their attention to the Confederate cause, they instead focused on battling with the Confederate government's railroad chiefs and on protecting or even increasing the size of company treasuries. Yet, the civilian rail officers cannot shoulder all the blame for the breakdown of Virginia's railroads during the Civil War. Department heads in the Jefferson Davis administration also failed the railroads and left the carriers scavenging for resources that should have been readily available. The absence of strong legislation authorizing the regulation of the railroads, for example, haunted the Confederacy through the course of the war. Effective leadership of the state's railroads at the civilian and government levels did not exist in sufficient quantities. The failure of Virginia's railroads to meet wartime goals directly contributed to the Confederacy's collapse in 1865.

Historian Richard Beringer explained that despite the problems associated with the Confederacy's lack of manpower or the absence of raw materials, no Confederate army lost a battle for lack of shoes, guns, or ammunitions. Defeat for the Confederacy, Beringer noted, came as the result of an inadequate transportation system.⁴ The Civil War challenged the Union and the Confederacy to find ways of applying the principle of

³George E. Turner, *Victory Rode the Rails: The Strategic Place of Railroads in the Civil War* (New York: Bobbs-Merrill Company, 1953), ix.

rapid movement in warfare. When Confederate military officers in the field failed to utilize the railroads in troop movements or when they did not seek the expert advice of experienced railroaders, too often they committed blunders that affected their ability to outmaneuver their Union counterparts.⁵ Because the use of railroads during the war allowed for the moving of men and materials over extended distances, commanders needed more than a rudimentary knowledge of rail operations. Unfortunately, most commanders lacked such knowledge.

Virginia's railroads experienced dramatic resource shortages during the war. In addition to the coastal blockade, the Union Army's capture of Norfolk, Virginia's primary deep-water port, prevented needed supplies such as iron from entering the Confederacy. To compensate for the lack of goods that normally entered Virginia through its harbor cities, the people of the state turned to the railroads to deliver the materials they needed to survive the war.⁶ As the most populous, yet war-torn state in the Confederacy, Virginians did not enjoy the luxury of living off the land. Crops not consumed by the local population were either confiscated by Confederate commissary officers or consumed or destroyed by Union soldiers. The Confederacy needed the cooperation of Virginia's railroads to fight a war governed by logistics and mobility. Railroad Bureau chiefs William Ashe, William Wadley, and Frederick Sims attempted to arrange for the interchange of rolling stock to ease the strain on rail operations in Virginia. Their efforts, however, resulted in loud protests from the carrier presidents. Because the state Board of Public Works owned the majority of stocks of Virginia's

⁴Richard Beringer, *Why the South Lost the Civil War* (Athens: The University of Georgia Press, 1986), 12.

⁵Jeffrey Lash, "Civil War Irony: Confederate Commanders and the Destruction of the Southern Railways," *Prologue* (Spring 1993): 35-47.

⁶Clark, *Railroads in the Civil War*, 2.

primary lines, Governor John Letcher possessed the authority to regulate the state's railroads. When he chose not to intercede between the railroads and the Railroad Bureau, the rail situation in Virginia worsened. Following the Governor's example, the Virginia legislature did little to force the railroads into performing greater levels of support. Clark wrote that the Virginia General Assembly "never positioned itself to prosecute a war so heavily influenced by logistics. It never understood the nature of the war it found itself fighting. The Virginia General Assembly . . . did not plan. It did not organize. It did not manage. It wasted resources and made poor use of the potential opportunity of blockade running."⁷

Each of Virginia's railroads began the war with valuable reserves of iron and replacement parts. None of Virginia's carriers, however, possessed sufficient supplies of reserves to last beyond a two or three month period. Expecting an early end to the war, carrier presidents and superintendents mistakenly believed their stocks of iron and replacement parts adequate enough to last the war. Therefore, they made little effort to replenish supplies that evaporated from the increased usage of their equipment. Blockade-runners that successfully made their way through the Union coastal defenses brought in only meager amounts of iron and never in quantities abundant enough to reduce the shortages. Consequently, the road companies depleted their iron supplies by the end of the first year of the war and found themselves needing more. The need to move large bodies of men and many tons of goods from one battle area in Virginia to another taught valuable and unprecedented lessons in logistics. Huge quantities of food supplies, picked up in the Shenandoah Valley, had to be transported to Richmond to support the Confederate forces defending the capital city. Delays caused by worn track

⁷Clark, *Railroads in the Civil War*, 228.

or regional quartermasters moving too slowly caused Confederate soldiers and citizens to suffer.⁸ The Virginia legislature provided only bare assistance to the road companies once the levels of railroad supplies reached critical levels. Despite holding the majority of the carrier's shares of stock, the General Assembly took the opinion that the railroads held sole responsibility for obtaining additional resources or for performing repairs. Tredegar Iron Works, possessing the largest array of foundries in the South, offered little or no assistance to the railroads. Joseph R. Anderson, Tredegar's managing partner and owner, ceased rail production before the war, causing the carriers to seek alternative methods of procuring replacement rails. The carriers had no choice but to resort to cannibalism and scavenging, two practices that proved more detrimental than beneficial. Speed and efficiency took a back seat to survival and equipment intended to last fifteen to twenty years lasted no more than five years.

The shortage of labor also interfered with the railroad's ability to meet wartime goals. Early in the war, many northern-born mechanics left their jobs on Virginia's railroads to return home. At the same time, Virginia-born railroad employees rushed to join the Confederate army or navy, causing the carriers to scurry about the towns and countryside in search of replacement workers. Although early Confederate conscription acts exempted railroad workers, labor shortages plagued the railroads for the duration of the war. Carriers resorted to hiring slaves from local plantations only to find their companies paying high rates to the owners for the slave's labor. Yet, without the labor supplied by the bondsmen, Virginia carriers had no chance of surviving the war.⁹ Slaves,

⁸Allan Nevins, *War For the Union* (New York: Konecky & Konecky, 1971), volume 4, "The Organized War," 384.

⁹Henry Steele Commager, *The Defeat of the Confederacy: A Documentary Survey* (Princeton, New Jersey: D. Van Nostrand Company, 1964), 2.

however, were not trained in railroad repair and so, preventive maintenance and equipment upkeep suffered.

In addition to the lack of resources and labor shortages, historian Edward G. Campbell believed that “the most injurious tendencies against which Virginia’s railroads fought were attributable to the carelessness of depot quartermasters. Each quartermaster in the field acted independently, and all of them tended to stock up for any contingency; as a result, everytime the Confederate Army in Virginia moved, carloads of goods returned unused to their depot or were destroyed. These supplies were not only wasted, but they monopolized the already limited amount of railroad equipment available to Virginia’s railroads.”¹⁰ Fully loaded cars returned to marshalling yards and waited for depot quartermasters to either unload the freight or to hire laborers to transfer the goods to the cars of another carrier. In many cases, unloaded cars sat on sidings for weeks, the goods inside rotting while Confederate soldiers in the field suffered from food and material shortages. Campbell wrote that the Confederate railroads in Virginia failed to adhere to three fundamental rules related to supply accountability, labor management, and scheduling. Until the goods were actually needed, Campbell believed the supplies needed to remain at the supply bases, and only in such quantities that their removal did not require great amounts of time. Depot managers also did not realize the benefits of hiring civilians or using soldiers recuperating from minor injuries to unload the cargo. To avoid costly delays, Campbell wrote “the answer lay in station managers employing improved scheduling techniques to ensure loaded trains did not sit for days or weeks.”¹¹ Despite the continuing efforts by William Ashe, William Wadley, and Frederick Sims to

¹⁰Edward G. Campbell, “The United States Military Railroads, 1862-1865,” *The Journal of American Military History Foundation* 2 (Summer 1938): 70-89.

convince station managers to quickly unload the goods, great amounts of materials continued to sit unused and unavailable to Confederate soldiers and civilians.

Across the North and South, gaps in the lines and varying track gauges existed. The Virginia rail system in 1860 consisted of several primary carriers supported by numerous, smaller lines. Before the war, when railroad construction in Virginia went forward at a fast pace, commerce benefited from the heavy-hauling capabilities provided by the carriers. Before 1860, road company superintendents realized that industry and business leaders viewed the railroads as the primary commercial carriers of an expanding nation.¹² Rail gaps, unconnected stations, and incompatible gauges, however, played a direct role in the carriers' ability to handle wartime traffic and to meet the Confederate Army's needs. Cars from one line that used the wider, five-foot gauge track could not traverse the rails of other companies that used the narrow four-feet, eight inch gauge. Except in the northwestern counties where the Baltimore & Ohio Railroad operated, Virginia railroads experienced a shortage of sidings. Also, again excluding the B&O, all of Virginia's railroads operated as single-track lines, a condition that prevented the passage of trains traveling in opposite directions.¹³ Once the war began, new dimensions of transportation appeared. As long as gaps and differing gauges hampered the speedy transfer of men and materials, the overall effectiveness of each carrier in Virginia suffered. Subsequently, the Confederate Army's ability to respond to emergencies suffered as well. The superintendents, however, balked at creating a uniform track gauge across Virginia. At major supply points and railroad junctions such as Petersburg, local ordinances prevented the linking of lines in order to protect local businesses and

¹¹Campbell, "The United States Military Railroads," 87.

¹²Nevins, *War For the Union*, vol. 4, 384.

hotelkeepers from losing customers.¹⁴ As early as December 1861, Virginia Governor John Letcher sent a message to the Virginia General Assembly pointing out the necessity of linking Virginia's railroads. The legislature allowed the Richmond, Fredericksburg, and Potomac Railroad to form a junction with the Orange & Alexandria and the Manassas Gap Railroad but prohibited such linkings between other carriers.¹⁵

Conventions between government railroad officers such as Ashe, Wadley, and Sims, and civilian superintendents resolved little and blocked compromise. The degree to which the ill sentiments between the government and Virginia's rail superintendents existed clouded a relationship that required understanding from both parties. The answer to Virginia's rail problems lay in regulation rather than compromise, however. The longer the war lasted, the longer the Confederate Congress and the Virginia legislature hesitated at regulating the railroads although the central government sought to bring the carriers under government control in 1861 and 1863. When the Confederate Congress passed the most sweeping railroad regulation legislation in February 1865, it was a matter of too little and too late. The war ended less than two months after the Confederacy adopted railroad legislation that held the carriers more accountable for their actions.

In addition to doing a better job of acquiring resources and managing labor, Northern railroads during the Civil War also enjoyed improved levels of organization and leadership not seen in Virginia's carriers. Virginia's rail superintendents, despite their privileged backgrounds and many years of education, proved unable to recognize or adapt to the logistical demands placed upon them by the war. Their unwillingness to adopt a uniform rail gauge, to link the different lines, or to allow for the interchange of

¹³Commager, *The Defeat of the Confederacy*, 155.

¹⁴Nevins, *War For the Union*, vol. 4, 241.

rolling stock diminished the state's ability to meet civilian and military needs. The superintendents failed to come together as one organization comprised of several parts working toward a common goal. The Union and Confederate governments each faced similar challenges and difficulties in establishing political, military, and industrial policies. Where the railroads of Virginia failed to establish an effective and supporting relationship with the state legislature and the Confederate Congress, northern railroads experienced no such difficulty. Across the North, railroads worked together to establish rate agreements for both military and passengers and freight, to integrate the operation of privately owned and competing railroads, and they found ways to compensate for the loss of skilled manpower brought on by the war.¹⁶ Virginia's railroads, like most Southern carriers, suffered from poor management brought on by the lack of maintenance and replacement parts, shortages of labor, and a lack of confidence in the government.

Historian John Clark noted "good managers analyze problems even though they are sometimes handicapped by incomplete or inaccurate information and hindered by externally imposed time constraints. They use their experience and skill, regardless of obstacles, to make decisions that solve problems. The Confederacy denied itself any measure of control over the [railroad] challenges it faced."¹⁷ In a situation that begged for control spread over a wide area, Virginia's railroad superintendents ruled nothing more than their individual companies. Instances occurred, however, where superintendents agreed to allow locomotives and rolling stock of a competing carrier to travel across their track. The junction at Gordonsville, Virginia, affords an excellent example of two carriers working together to accomplish their respective company

¹⁵ *Acts of the General Assembly of the State of Virginia, 1861-1862*, 67-71. Hereafter cited as *Acts*.

¹⁶ Clark, *Railroads in the Civil War*, 5.

missions. At Gordonsville, the Virginia Central Railroad coming west from Richmond on its way to the Shenandoah Valley shared track with the Orange & Alexandria coming from northern Virginia as that line made its way toward south-central Virginia. These agreements, however, were too few to make a difference in the overall rail operations in Virginia. Too often, Virginia's superintendents mistrusted the superintendents of other carriers and refused to find ways of working together to serve the Confederacy. While the civilian railroad officers did not respond well to the ever-changing environment brought on by the war, one cannot fault them for failing to anticipate the unknown. The Civil War presented Virginia's rail superintendents with new management and organizational challenges that required solutions beyond the state's ability to provide resources, the superintendent's knowledge, or the experience levels of their maintenance directors. Remaining blind to the persistent failures of Virginia's railroads to meet wartime goals and needs or to learn from their mistakes is, however, a fault that is attributable to Confederate government and civilian road officers. "Southern disdain for commerce and manufacturing," John Clark wrote, "produced too few men with the vision, experience, or skill necessary to address and solve Virginia's rail problems."¹⁸ President Jefferson Davis and Quartermaster Abraham C. Myers represent the most notable of Confederate leaders who lacked the vision and experience to take advantage of the best rail system in the Confederacy. Davis and Myers blocked numerous efforts to regulate the railroads when doing so offered the possibility of easing the rail situation in Virginia. Myers' insistence that the chief of the Railroad Bureau come under the Quartermaster's Department jurisdiction created problems in a system that suffered from

¹⁷Clark, *Railroads in the Civil War*, 220.

¹⁸Clark, *Railroads in the Civil War*, 217.

having too many leaders and not enough followers. Historian Paul D. Escott wrote that Jefferson Davis, as did his counterpart Abraham Lincoln, hesitated to regulate the railroads because he believed the superintendents possessed more knowledge than government personnel about running a railroad.¹⁹ In the North, however, Lincoln had no need to regulate the railroads. Throughout the war, he received almost complete cooperation from Northern rail superintendents. Economics historian Richard Goff wrote, “the key figure in the Confederate administrative drift was Jefferson Davis. He was hardly a man to plan knowingly for the subordination of individual liberties to the necessities of the state. Allowing events to move him haphazardly towards a centralized administration as the war progressed, he often delayed and defeated centralizing measures deemed necessary by others, only to embrace these same measures himself at a later time, often when it was too late.”²⁰ Jefferson Davis’s lack of forceful leadership at the executive level precluded the railroads from reaching their highest potential. Davis entered the last two months of the war armed with strong legislation that allowed him to regulate and to seize the railroads as necessary: he never used that authority and the end of the Civil War found Virginia’s railroads in a condition that required years to repair.

Exceptions exist, however, to those who must shoulder the blame for the failure of Virginia’s railroads to meet the demands of the Civil War era. Most notably, William Ashe, William Wadley, and Frederick Sims performed to the best of their ability to integrate Virginia’s railroads. Railroad Bureau Chiefs Ashe, Wadley, and Sims each sought to bring order from chaos by working closely with Virginia’s rail superintendents. For their efforts, however, they received notices of rate increases from the

¹⁹Paul D. Escott, *After Secession: Jefferson Davis and the Failure of Confederate Nationalism* (Baton Rouge: Louisiana State University Press, 1978), 54.

superintendents and reprimands from state governors. The Confederate government ignored Sims' and Wadley's effort to organize Southern railroads and, consequently, allowed a problem it did not have the luxury of overlooking to worsen.

In the discussions concerning the lack of Confederate leadership and Virginia's railroads, the role played by Tredegar Iron Works President Joseph R. Anderson places him midway between helping the state's carriers and hindering the road company's ability to meet wartime objectives. Intelligent and resourceful, Anderson displayed the acute ability to adapt to the changes brought to Virginia's iron industry by the war. Anderson understood the railroad's need for iron and early in the war he filled many railroad orders for replacement parts.²¹ His efforts at satisfying road company orders, however, fell short of meeting or exceeding the carrier's needs for iron rail. Under Anderson's direction, Tredegar forges ceased rolling iron rails in 1858. Subsequently, Virginia's railroads looked to Northern forges for replacement rail. As soon as the Union Navy imposed the coastal blockade, the shipment of iron rail to Virginia stopped. Anderson, realizing the environment Virginia's carriers existed in, continued to produce ordnance for the Confederacy but did not roll a single bar of railroad iron during the course of the war. Despite his intelligence and keen business sense, Anderson lacked the same foresight as many Confederate leaders in regards to the railroads. As Tredegar's director, Anderson had the authority to redirect a portion of the ironworks output toward producing replacement rail. Instead, Tredegar's forges continued to produce ordnance. Anderson's decision to cease rail production forced Virginia's railroads in 1860 to hoard their iron reserves. Hoarding, however, soon fell victim to scavenging as carrier

²⁰Richard D. Goff, *Confederate Supply* (Durham: Duke University Press, 1969), 243.

quartermasters depleted company stocks of iron. Once the railroads expended all available iron reserves, they turned to internal cannibalism to satisfy at least some portion of their need for replacement rails. Joseph Anderson watched political events as closely as he watched Tredegar's financial accounts. That he failed to anticipate Virginia's wartime needs points to a very intelligent man experiencing serious errors in judgement.

As a law-making body, the Confederate Congress failed Virginia's railroads. In 1861, upon the advice of the Confederacy's first rail chief, William Ashe, Louisiana Senator Charles Conrad proposed legislation that granted Jefferson Davis the authority to regulate the Confederacy's railroads. The bill's death in the Confederate Senate paved the way for future legislative railroad-related defeats until 1863 and the passage of the first Confederate railroad law. As Goff pointed out, "in most of the legislation dealing with railroad matters, Congress dutifully followed the recommendations of the [carrier] executives, and when such recommendations were deficient, did little to improve them. When Congress took an independent stand, it was usually detrimental to the railroad effort. Above all, it acted too slow and too late on regulating the railroads."²² Not until February 1865 did the Confederate Congress authorize Secretary of War James Seddon to assume control of the railroads. By then, with the majority of Virginia's railroad no longer in service or barely hanging on; regardless, the act simply did not matter.

It is necessary, however, to examine the role played by carrier superintendents in Virginia rail operations between 1861 – 1865. Robert Black wrote that Virginia's rail superintendents, like all Southern road company officers, proved unwilling "to make

²¹Charles B. Dew, *Ironmaker to the Confederacy: Joseph R. Anderson and the Tredegar Iron Works* (New Haven: Yale University Press, 1966), 271.

²²Goff, *Confederate Supply*, 245.

serious sacrifice of their personal interests.”²³ As a group, Virginia’s rail superintendents managed the best pre-war rail system in the South. As individuals, each viewed their respective companies as the most important railroad in the state. Virginia most needed the superintendents to form an alliance that focused less on the survival of individual lines and more on the successful operation of all Virginia carriers during a time of war. Faced with shortages of skilled labor and a fixed amount of resources, Virginia’s rail superintendents and presidents viewed the financial survival of their road company as their top priority. Before the war, the men who managed Virginia’s railroads did so with few restraints. Carrier officers expected to run their companies free of government restraint although the state owned the majority of a carrier’s stocks. Despite several attempts by Confederate Senators or Representatives to regulate the railroads, the carrier superintendents displayed high levels of independence. It is true that carrier officers whined and complained to and about each other, and that they scorned Confederate congressional authority. No evidence exists, however, that the superintendents refused outright to obey state or government laws. Virginia’s road company officers appeared before the Confederate Congress on several occasions seeking draft exemptions or assistance in obtaining valuable resources such as iron. In 1969, Richard Goff noted that because “railroad personnel exercised a level of independence that proved detrimental to the overall effectiveness of Virginia railroad operations . . . there existed an almost purposeful resistance to the war effort.”²⁴ At rail conventions, rather than create solutions to the state’s rail problems, carrier presidents fought Ashe, Wadley, or Sims over government rates and schedules. Writing in 2001, John Clark disagreed with Goff.

²³Black, *Railroads of the Confederacy*, 294.

²⁴Goff, *Confederate Supply*, 246.

“One seeks in vain,” Clark noted, “for evidence that Virginia’s railroad superintendents defied either the Virginia legislature, the Davis administration, or his subordinates who laid down the law.”²⁵ As long as they obeyed the law, even if they did so unwillingly, Virginia’s railroad superintendents worked to ensure their lines survived the war in the face of increasing resource and labor shortages. The breakdown of Virginia’s railroads during the Civil War cannot rest solely on the shoulders of the carrier superintendents and officers. The Confederate Congress and the Virginia legislature must share the responsibility for the state’s inability to support the Confederate war effort. The Congress allowed the superintendents too much freedom during a time of national crisis. Rather than impose its will over the railroads, the Confederate Congress allowed the carriers to act too independently for too long and under carrier-created guidelines rather than state-directed regulations. Free commerce is preferable to state-directed trade but not in a time of dire circumstances, and never during a period of civil war when the needs of the greater cause and the military must take priority.

By April 1865, after four years of devastating war, effective rail service ceased to exist in Virginia. The result of shrinking manpower and resource reserves and a lack of mobility on the carrier’s part left Virginia to enter the Reconstruction period with few of its prewar lines still running. No more than three of the state’s primary lines under Confederate control at the end of the war functioned beyond minimal levels of operation. The Virginia Central, the Southside, and the Virginia and Tennessee Railroads remained open at the end of the war but each company’s future hung in the balance. Confederate troops in the field suffered from hunger although abundant supplies of crops waited in the fields of North Carolina and Georgia. The inability of Virginia’s railroads in the spring

²⁵Clark, *Railroads in the Civil War*, 227.

of 1865 to deliver the food to the soldiers attested to the carrier's failure to supply rail transportation to the armies that fought across the state.²⁶ After the war, as railroad and military leaders searched the past to discover the reasons for the breakdown of Virginia's railroads, they realized they had been presented with a series of valuable lessons. Chief among the lessons learned were that the Confederacy failed to protect its advantage of interior lines. Robert Black noted that "as long as the majority of those lines remained intact, the southern front gave ground, but it did not suffer general collapse."²⁷ As Virginia's railroads suffered from manpower and material shortages, the decline of the railroads grew more imminent with each passing year of the war. The condition of Virginia's prewar railroads contributed to the breakdown. Before the conflict, railroads crossed every region of the state, yet too many gaps in the lines existed. The lack of continuous lines slowed traffic before the war: once the fighting began, the absence of connections pointed to a certain but slow death for the state's road companies. The Virginia Board of Public Works invested neither the time nor the funds to ensure that lines from the different companies met at strategic and commercial junctions. Had the BPW worked to close the gaps, the movement of soldiers and materials essential for victory would have eased the strain on the state's railroads. In addition to the lack of connections between communities, Virginia's railroads traveled on two different gauges of track. Again, the responsibility for the failure to establish a standard, pre-1860 track gauge across Virginia falls on the BPW. Except in Virginia's metropolitan or commercial centers such as Richmond and Norfolk where several railroads entered each community, the resulting logistical mess hampered Virginia commerce before the war.

²⁶Goff, *Confederate Supply*, 250.

²⁷Black, *Railroads of the Confederacy*, 293.

After April 1860, the presence of varying gauges reduced the speed in which the of war business was conducted to a crawl.

The Confederate Congress and the Virginia legislature also contributed to Virginia's railroads not meeting wartime needs. Where the North possessed a strong central government that had defined goals and understood the value of cooperation from civilian and military institutions, the South did not. The Confederate Congress and the Virginia General Assembly hesitated at enforcing effective railroad legislation until the outcome of the war was a foregone conclusion. Governor John Letcher failed to perform his executive duty and seize the railroads on the state's behalf. Although impressing Virginia's railroads did not ensure a Confederate victory, doing so presented the possibility of slowing the collapse of Virginia's road companies. Historian John Clark explained that nations at war cannot ignore reality.²⁸ As the weaker combatant of the Civil War, Clark explained, the Confederacy failed to take the necessary and bold steps that achieved maximum effectiveness from its war-making resources.²⁹ The Confederacy did not satisfy its every need as a nation struggling for independence. No strong government support system existed, particularly in regards to its rail system. Virginia's railroads during the Civil War era were only as effective as the men who ran them, from the superintendent of each line down to the man who drove the spikes that connected the rails. The Civil War taught many important rail-related lessons but perhaps the most obvious of all was that men counted on to run Virginia's railroads failed at their jobs when they were expected to succeed. That Virginia's road companies superintendents failed to support the Confederate war effort does not suggest their inferiority to their

²⁸Clark, *Railroads in the Civil War*, 27.

²⁹Ibid.

Northern counterparts. Their failure as railroad superintendents is, as explained by Robert Black, “a minor chapter in a huge tragedy.”³⁰

³⁰Black, *Railroads in the Confederacy*, 295.

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