

RETURN TO THE HIGH IRON:  
THE OPERATION AND INTERPRETATION OF  
MAINLINE STEAM EXCURSIONS IN THE UNITED STATES

by

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## ABSTRACT

The steam locomotive is one of the most recognizable artifacts from industrial history. After their demise in the mid-twentieth century, those that were not cut up for scrap found homes at new transportation museums and with railroad historical organizations. Beginning in the 1960s, more than a dozen American railroads offered special excursion trains powered by steam locomotives as a unique experience for people to ride behind a piece of history. Non-profit organizations continued this practice into the twenty-first century granting people the opportunity to ride on steam excursions.

This thesis examines the history of mainline steam excursions, why they started, and how present day partnerships between railroad companies and non-profit organizations provide an excellent opportunity to advance the interpretation of transportation history. Cultural products of the early twentieth century created nostalgic feelings towards American railroading. Companies used this nostalgia to improve public relations through steam-powered excursions. Current non-profits with active steam locomotives can use them as interpretive tools for both cultural and industrial history while simultaneously enhancing local heritage tourism.

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## INTRODUCTION

The creation of Amtrak in 1971 ended an era of privatized rail travel originating with the first railroads in the 1830s. The new age of passenger rail service never garnered the same appeal of the previous “golden age of railroading” filled with imagery of Pullman cars, watchful porters, five-course meals, and the steam locomotive. However, this image of rail travel endured into the modern era of railroads, spawning an unprecedented period of restoration efforts to achieve even a sliver of the former grandeur of American railroading. The railroads’ connection with the public is unique from other modes of transportation. People may be interested in specific automobiles or early airplanes, but it is the allure of traveling by train that still resonates today.<sup>1</sup> People spend thousands of dollars each year to relive a glorified version of the past where luxurious travel was the standard and people preferred comfort rather than speed. One of the most endearing and tangible pieces of railroading history is the steam locomotive.

In the years following World War II, the rail industry made a fundamental change by transitioning their motive power from steam locomotives to newer, more efficient diesel locomotives. Some railroad companies sold off some of their steam locomotives to smaller railroads or donated them to cities for public display, but the majority of steam engines were cut up and sold for scrap metal. During this conversionary period, tourist lines and scenic railroads started to preserve and operate older rail equipment over routes deemed unprofitable by the railroad companies. These operations typically featured a

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<sup>1</sup> George H. Douglas, “Lucius Beebe: Popular Railroad History as Social Nostalgia,” *Journal of Popular Culture* 4, no. 4 (March 1971), 894-895.

smaller steam locomotive running with a few cars through an unpopulated part of the former railroad's territory.<sup>2</sup> While these early efforts did help save historic railroad equipment, it was the mainline steam movement of the latter half of the twentieth century that created thousands of rail enthusiasts and promoted railroad preservation on a national scale.

Mainline steam excursions differ from scenic or tourist railroads in the sense that they are in the public eye far more than their smaller counterparts. The trains operate over the tracks of a host railroad company providing a unique experience for the passengers and serve as a public relations tool for the company. Mainline excursions can occur on Class I, II, or III railroad tracks depending on the willingness of the specific company's management.<sup>3</sup> The vast amount of traffic and logistics make operating excursions on Class I railroads difficult, but these are often the most popular among rail enthusiasts. These trips appeal to people because of the special opportunity to ride in historic rail equipment over tracks that previously belonged to a predecessor railroad company that provides a unique connection to the passenger, whether it is a familial connection through an ancestor who worked for the railroad or simply an interest in that particular company. Additionally, those with little interest in transportation history are instantly faced with a tangible, operational artifact of industrial heritage when they are stopped at a grade crossing and see a steam locomotive pulling a string of 1940s and 1950s era passenger

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<sup>2</sup> Ron Ziel, *The Twilight of Steam Locomotives: The Complete Story of the Last Steam Locomotives in North America* (New York: Grosset & Dunlap, 1963), 68-69.

<sup>3</sup> For the purposes of this thesis, I will only be looking at mainline excursions on Class I railroads. A "Class I" railroad is a company with an operating revenue of \$467 million or more as of 2013, "Class II" are regional railroads and "Class III" forms the smallest bracket of railroads. See "Class I Railroad Statistics," Association of American Railroad, accessed May 12, 2015, <https://www.aar.org/Documents/Railroad-Statistics.pdf>.

cars. Freight trains are a part of everyday life but often slip into the background or only noticed when passing trains stop automobile traffic. The abnormal sight, similar to a Ford Model “T” on the interstate, creates an instant comparison of old and new. The steam locomotive at the head end of the train is the initial attention grabber but, only after years of restoration and maintenance by a dedicated group or organization, is it able to pull trains again.

The act of doing the work to make a steam locomotive operable again is commonly referred to as a restoration project. “Restoration,” as defined by the National Park Service, is depicting, “a property at a particular time in its history, while removing evidence of other periods.”<sup>4</sup> To make a steam locomotive operable for the mainline it must meet Federal Railway Administration standards ensuring safe operations and the ability to navigate modern railroading networks. This is similar to historic properties becoming compliant with the Americans with Disabilities Act by adding wheelchair ramps. As a result, almost every operable steam locomotive possesses safety equipment that does not reflect the historical period of significance. For example, several steam locomotives now have a brake stand from a diesel locomotive due to its higher efficiency of slowing the train down. Additionally, steam locomotives are machines with thousands of mechanical parts that wear out over time. Only a select number of companies still have the ability to make new parts for these antique machines. The new pieces combined with the old create a hybrid machine that reflect different eras of the locomotive’s history but

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<sup>4</sup> “Four Approaches to the Treatment of Historic Properties,” National Park Service, accessed June 15, 2015, <http://www.nps.gov/tps/standards/four-treatments.htm>.

display an object from its period of origin.<sup>5</sup> This constant need to analyze, repair, and replace pieces is similar to a historic structure that requires constant upkeep. Specialists use modern materials and techniques to keep the historic building and locomotive in a presentable condition. It is important to bestow on the public the truth about what they are seeing in regards to what they are seeing today is not exactly what they would have seen during its period of significance.<sup>6</sup> Because it is the universally accepted term in the railroad preservation field however, this paper will refer to the repair work conducted to a locomotive to make it operable as a “restoration.”

Mainline steam excursions and the active restorations of old steam locomotives have received insufficient attention from public historians. What has been written about steam excursions and corporately funded restorations is contained within the volumes of business history for specific railroad companies or narrative histories written by rail enthusiasts with little academic background. While these volumes provide useful information, they lack the historical insight into how this movement fits into the larger context of railroad and public history. Using a myriad of sources including corporate magazine articles, mechanical blueprints, cultural byproducts, and various secondary sources, this thesis will analyze the rejection, nostalgia, restoration and operation of steam locomotives in the United States.

Chapter 1, “Romance of the Rails: How Trains Became the Object of Nostalgia, 1900-1945,” analyzes the steam locomotive and passenger train as an American cultural icon. Beginning in the early 1900s, cultural products using the image of the train shifted

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<sup>5</sup> John H. White, “Preserving a National Symbol: The Steam Locomotive,” *The Journal of the Society of Industrial Archaeology* 7, no. 1 (1981), 55-56.

<sup>6</sup> White, 59-60.

from tales of disaster, employee martyrdom, and corrupt management to portraying the train as a glorified mode of travel representing romance and nostalgia. Using songs, film, and artwork from the first half of the twentieth century, I will show how the railroads became an endearing image of adventure and mobility during the period when they lost their reign over the transportation market. Chapter 2, “Industrial Machine to Industrial Oddity: The Emergence of Mainline Steam Excursions,” analyzes the initial preservation movements through the creation of historical groups and the resurgence of steam locomotive operation by using the Southern Railway Excursion Program as a case study. The Southern’s partnership with the Tennessee Valley Railroad Museum created an era of steam restoration and operation of eighteen different steam locomotives. The chapter ends with the demise of the Southern steam program and the struggle of transportation museums.

Chapter 3, “Interpretation for the 21<sup>st</sup> Century,” examines the resurgence of mainline steam operation through the Norfolk Southern Railway’s “21<sup>st</sup> Century Steam” program permitting a limited number of steam powered excursions on their network for employee appreciation specials and public trips. The collaborative efforts between Norfolk Southern and the various historical organizations involved with the project provide an extraordinary opportunity to advance the marketing and interpretation of transportation in industrial heritage museums. I will use the Virginia Museum of Transportation’s “Fire Up 611!” project as a case study to analyze the difference between the two eras of southeastern mainline steam excursions and the various ways a steam locomotive’s history can be interpreted.

Operable steam locomotives pulling a train of historic passenger cars provide nostalgic emotions of the past and the urge to experience that past once again. This glorified historical experience can serve as a tool for both railroad corporations and transportation museums to be more in the public eye and advance the history of transportation in the United States. The success of these partnerships can then translate to other industrial heritage sites and museums struggling to broadcast their message to a willing audience.

## CHAPTER ONE

ROMANCE OF THE RAILS: HOW TRAINS BECAME THE  
OBJECT OF NOSTALGIA, 1900-1945

American railroads have long captivated the mind and imagination of any person experiencing the sights and sounds of a passing train, whether inside the train itself or watching trackside as it whizzes by en route to an unknown destination.<sup>1</sup> At the height of their domination over the American transport market, 254,251 miles of parallel iron rails connected cities and provided countless small towns a direct line of communication, travel, goods, employment, and prosperity.<sup>2</sup> Public sentiment towards railroads evolved with the industry itself. Michael Kammen writes, “During a span of roughly a century and a half, the railroad shifted from being a symbol of dramatic and unimagined progress (1830s and ’40s) to representing abusive and regressive economic power (1880s and ’90s) to becoming the object of wistful nostalgia on the part of tradition-oriented train buffs.”<sup>3</sup> The “wistful nostalgia” now associated with the glory years of rail travel is not, as Kammen argues, solely the part of “tradition-oriented train buffs” but rather a culmination of the media and cultural products that employ the imagery of trains and railroads.

During the early twentieth century, the image of the railroad evoked nostalgia and romance through early films, music, literature, and artwork by depicting trains as

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<sup>1</sup> See John R. Stilgoe, *Metropolitan Corridor: Railroads and the American Scene* (New Haven: Yale University Press, 1983) and Roger H. Grant, *Railroads and the American People* (Bloomington, IN: Indiana University Press, 2012).

<sup>2</sup> Grant, xi.

<sup>3</sup> Michael Kammen, *Mystic Chords of Memory: The Transformation of Tradition in American Culture* (New York: Alfred A Knopf, 1991), 48.

glorified machines promising mobility and hence freedom. This imagery of railroading came at a time when the railroad industry was actually struggling to compete with new, faster modes of transport leading to the introduction of diesel locomotives and streamlined trains. Ironically, the contemporary nostalgic view of the golden age of American railroads centers on a period of decline where the traditional mode of transport succumbed to new, modern ways of travel.

To comprehend how the railroads evoke a sense of nostalgia and escape, it is first necessary to understand the historical meaning of nostalgia. The term “nostalgia” first emerged in 1688 as a medical condition given to exiled Swiss mercenaries suffering from extreme homesickness. Swiss physician Johannes Hofer combined the Greek words for home, “nostos,” and longing or painful condition, “algia,” to identify the illness as “nostalgia.” The term then evolved from a disease of geographical displacement to a universal sociological feeling of an idealized version of a personal or perceived past.<sup>4</sup>

Nostalgia did not receive much scholarly attention until the 1980s when historians and sociologists disparaged the idea believing nostalgia was nothing more than an “uncritical, retrogressive, conservative malaise,” which, according to historian David Lowenthal, “tells it like it wasn’t.”<sup>5</sup> Since then, other historians have discovered the merits of researching the role of nostalgia and how it shapes memory. Svetlana Boym’s research on post-Communist Russia led her to the conclusion that, “Nostalgia inevitably

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<sup>4</sup> David J. Anderson, “Nostalgia for Christmas in Postbellum Plantation Reminiscences,” *Southern Studies* 11, No. 2 (Fall/Winter 2014): 44.

<sup>5</sup> David Lowenthal, “Nostalgia Tells it Like it Wasn’t,” in *The Imagined Past: History and Nostalgia*, ed. Christopher Shaw and Malcolm Chase (Manchester, UK: Manchester University Press, 1989), 18-9, 28-30.

reappears as a defense mechanism in a time of accelerated rhythms of life and historical upheavals.”<sup>6</sup> Historian David J. Anderson follows that notion arguing people have a “tendency to cling to the fondly remembered past... driven by an inherent necessity to codify a sense of attachment, connection, and affirmation in the formation and maintenance of the self” in the face of these periods of change.<sup>7</sup>

The railroad industry experienced an economic shock when the rising automobile industry diminished passenger revenue in the early 1900s. For the first time, a new form of technology had appeared that could dethrone the railroad. Additional emerging technology, like radio and motion pictures, put Americans in a new, modern era where they were forced to grapple with rapidly evolving forms of travel and entertainment. The new media depicted the railroad in a constant struggle between old and new, traditional and modern. People embraced these nostalgic views of a glorified era of American railroading as an escape into a previous time or unknown world. Nostalgia became a symptom, a historical emotion that, according to Boym, “is coeval with modernity itself.”<sup>8</sup>

### Nostalgia & Romance of the Rails

The rapid development of the automobile industry in the early twentieth century marked a turning point for the transportation of both goods and passengers. People were

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<sup>6</sup> Svetlana Boym, *The Future of Nostalgia* (New York: Basic Books, 2001), xiv.

<sup>7</sup> Anderson, 44-45.

<sup>8</sup> Boym, xvi.

no longer dependent on the railroads to get from place to place. Some had already started to view the rail industry as an antiquated mode of travel. In the first three decades of the twentieth century, filmmakers, authors, and even railroad employees interpreted the rail industry nostalgically, creating endearing impressions of an industry in crisis.

Early filmmakers used the image of the train in their first moving pictures shows at the turn of the twentieth century. Motion pictures shattered concepts of time and space much like the railroad industry had done with the standardization of time and the physical process of moving people over long distances. People could enter a theater and view far off destinations without ever leaving their hometown. Early filmmakers needed scenes that could show movement thus differentiate film from the still life of traditional photographs. The mechanical nature of a steam locomotive made it an ideal model for motion and time. The constant movement of the wheels and connecting rods on the sides of the engine and an unending stream of smoke bellowing from its smokestack created multiple sources of motion within one scene. The train as a moving image then transitioned over to travel films where filmmakers made movies of the moving scenery along a railroad's right-of-way. Early filmmakers realized that the train itself could be the setting of as well as the driving force behind a movie narrative.<sup>9</sup>

One of the first movies with a storyline was *The Great Train Robbery* (1903), produced by the Edison Manufacturing Company and directed by Edwin S. Porter. Most historians describe *The Great Train Robbery* as one of the first western films to glorify outlaws, robbery, and a posse of vigilantes. The movie, while only twelve minutes in

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<sup>9</sup> Lynne Kirby, *Parallel Tracks: The Railroad and Silent Cinema* (Durham, NC: Duke University Press, 1997), 3-10, 30-33; Nanna Verhoeff, *The West in Early Cinema: After the Beginning* (Amsterdam: Amsterdam University Press, 2006), 292-295.

length, depicts a beginning, middle, and end that features violence, murder, and redemption. A pursuing gang of locals caught the outlaws who stole the money and killed several innocent passengers and crew members. A shootout results, and the vigilantes killed all of the gang members. The final scene shows the gang leader firing point blank at the camera simulating the outlaw shooting the members of the audience.<sup>10</sup>

This is one of the first films that did not depict a scene of daily life or a fantasy accomplished by clever editing techniques, but instead gave the audience a simulated escape from everyday life. *The Great Train Robbery* transported the audience to another time and another place with the chance to experience an event they had only read about in the newspapers and dime novels. The catalog entry for the film remarked how the “sensational and highly tragic subject will certainly make a decided ‘hit’ whenever shown” and remarked how the film created a “faithful duplication of the genuine ‘Hold Ups’ made famous by various outlaw bands in the far West, and only recently the East has been shocked by several crimes of the frontier order.”<sup>11</sup> Despite its nineteenth century setting, *The Great Train Robbery* and other similar films featuring western “hold-ups” portray feelings of instability with control and power associated with modernity itself.<sup>12</sup> Porter’s simulation of a western “hold-up” cemented the image of the train as a vehicle

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<sup>10</sup> *The Great Train Robbery*, directed by Edwin S. Porter (Edison Production Co., 1903), from the Library of Congress, MPEG video, accessed February 18, 2015, <http://www.loc.gov/item/00694220>.

<sup>11</sup> Scott McGee, “The Great Train Robbery,” Turner Classic Movies, accessed February 20, 2014, <http://www.tcm.com/this-month/article/453459%7C193614/The-Great-Train-Robbery.html>; “The Great Train Robbery: Summary,” Library of Congress, accessed February 18, 2015, <http://www.loc.gov/item/00694220>.

<sup>12</sup> Verhoeff, 291-292.

for adventure while a later movie of his helped establish the train as, simultaneously, a setting of love.

The proximity of passengers riding on trains created a venue for meeting new people from various backgrounds. Railroad accommodations were divided by train ticket prices and thus established a social structure within the confines of the passenger cars. During the nineteenth century, women and African Americans were contained in separate waiting areas inside the stations away from the “smoking area” designated for white males. However, there were limited areas where people from all walks of life encountered one another. Social classes remained separated into their ticket accommodations but onboard lounges, dining cars, and station platforms created ideal space to mingle with new people and create new connections on a personal and intimate level.<sup>13</sup>

Trains and railroads themselves represented gendered entities to the people of their time. Throughout the nineteenth century, people viewed machines and the natural landscape in gendered terms. As historian Leo Marx has argued in *The Machine in the Garden*, “[The machine] invariably is associated with crude, masculine aggressiveness in contrast with the tender, feminine, and submissive attitudes traditionally attached to the landscape.”<sup>14</sup> The physical destruction of the natural landscape for the construction of the latest form of technology and industry established the railroad as a symbol of economic and social domination. The desire of railroad executives and innovative

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<sup>13</sup> Grant, 98-100.

<sup>14</sup> Leo Marx, *The Machine in the Garden: Technology and the Pastoral Idea in America* (New York: Oxford University Press, 1964), 29.

engineers left no natural obstruction or problematic terrain unconquered. As film historian Lynne Kirby points out, the movement of the trains across the landscape symbolized the libido of a male dominated industry.<sup>15</sup>

Beginning in the 1880s and 90s, however, railroads started using women in their advertisements to entice more female passengers to ride their trains. In doing so they hoped to exploit women's public presence. According to Kirby, "[women] stood as symbols of cultural legitimacy and guarantors of respectability."<sup>16</sup> Railroads aimed to counter their robber baron persona and publicize themselves as a good-natured industry that served the people and moved their goods. Dime novels and short stories produced in the companies' periodicals emphasized the romance that could be discovered while aboard one of their express or locals trains. Publishers often depicted these relationships as a female passenger swooning over a railroad employee or fellow passenger en route to the same destination. These stories and narratives found their way to early film productions.<sup>17</sup>

In 1903, the same year of *The Great Train Robbery*, Edwin S. Porter and the Edison Production Company released another film using a train as its setting but emphasizing romance rather than action. *A Romance of the Rails* told the story of a young couple who first met at the station platform while waiting for a train. The couple, both dressed in elegant, white clothes, board the train and enjoy the passing countryside on the rear observation deck. By journey's end, the couple is infatuated with one another and at

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<sup>15</sup> Kirby, 76-78.

<sup>16</sup> Ibid, 85.

<sup>17</sup> Ibid, 84-88.

the next stop, the rear deck transforms into a church altar. A minister appears from the car's rear door and conducts the marriage ceremony while the couple stands in front of him trackside between the iron rails. They disembark at the next station together in wedded bliss.<sup>18</sup>

The film parodied the Erie, Lackawanna, and Western (Lackawanna) Railroad's popular "Phoebe Snow" marketing campaign. Phoebe Snow was a white female character who appeared in many of the Lackawanna's promotional materials. The Lackawanna became known as "The Road of Anthracite" referring to what they viewed as the clean, efficient type coal. Anthracite brought in much of the company's revenue and was the principal fuel for its steam engines. The Lackawanna Railroad created Snow to combat the image of dirt and grime typically associated with mining and hauling coal. Phoebe Snow was always depicted wearing white clothes that were unsoiled as smoke poured out of the steam locomotive's smokestack. The clean Phoebe Snow paralleled the image of the landscape along the railroad's route, which is free of smoke and grime.<sup>19</sup>

*A Romance on the Rails* differed vastly from Porter's *The Great Train Robbery*. It changed the train from a setting of adventure and suspense to one of romance and love. The entire life of a relationship takes place on one train journey culminating in the tradition of marriage signifying their life's devotion to one another. The entire rear platform is transformed into an altar where a minister appears from the rear door to marry the fledgling couple. Within a ten-minute journey, the audience witnesses the rapid

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<sup>18</sup> *A Romance on the Rails*, directed by Edwin S. Porter (Edison Production Co., 1903), from Library of Congress, accessed February 27, 2015, <http://www.loc.gov/item/00694288>.

<sup>19</sup> Julian Watkins, *The 100 Greatest Advertisements of All Time 1852-1958* (Mineola, NY: Dover Publishing, 1959), 9.

development of love, devotion, and commitment again paralleling the fast nature associated with modernity.

Additionally, the movie served as a blatant advertisement for the railroad. The gentlemen's suitcase has a Lackawanna travel sticker on the side and a temporary sign showing the company's logo and slogan has a few seconds of airtime before the express train comes into view. The majority of the film is dedicated to the couple's time on the observation platform watching natural scenery as the train moves through a picturesque landscape. The attentiveness of the African American porter, who checks on the couple to brush any coal dust off of them, shows the level of luxury passengers could expect on a Lackawanna train.<sup>20</sup> Porter's *The Great Train Robbery* and *A Romance on the Rails* established the railroad as both a source of drama and adventure while also providing the setting of romance and love. Subsequent movies blended these two themes together telling the history of the country while simultaneously creating a love story between the characters.

Two such films of the 1920s were John Ford's *The Iron Horse* (1924) and Buster Keaton's *The General* (1926). Both films were set in the nineteenth century and employed the imagery of the railroad to tie the story together. *The Iron Horse* tells the story of the construction of the first transcontinental railroad in the 1860s that reaffirmed the ideology of America's Manifest Destiny, in which westward migration was seen as bringing democracy and order to the western frontier. Ford used the railroad as a symbol of American identity that brought the country together after the tragic and divisive Civil

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<sup>20</sup> "A Romance of the Rail: Summary," Library of Congress online, accessed May 27, 2015, <http://www.loc.gov/item/00694288>.

War.<sup>21</sup> Ford dedicated the film to the memory of Abraham Lincoln and thus situated Lincoln as the “divine narrator.” According to Lynn Kirby, it is “[Lincoln’s] spirit, identified with Progress and History, that guides the plot forward.”<sup>22</sup> Ford portrayed Lincoln signing the authorization for the construction of the transcontinental railroad showing him as the individual, the “American,” who was solely responsible for the victory of the Civil War and the re-union of the country free of the problems that had plagued it previously.<sup>23</sup>

Ford’s epic film glorifies the myths of western expansion and creates a nostalgic view of community, tolerance, and unity. As Kirby has argued, “Constructing one nation is achieved... by wiping out, or at least suppressing, difference--geographical, social, religious, ethnic, racial, political, economic, and sexual” through the agency of the railroad.<sup>24</sup> Ford painted the building of the railroad as the effort of a homogeneous community. He depicts Italian, Irish, and Chinese workers working with one another blending their cultures into a new, unified nation comprised of basic freedoms for all. In spite of this portrayal of unity, contemporary feelings toward these groups of people emerge.<sup>25</sup> The Irish workers constantly cause chaos throughout the film through their rambunctious ways and the Chinese workers only receive marginal attention in the overall narrative of the plot. In the film, the common enemy is the “savage” Indians who

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<sup>21</sup> *The Iron Horse*, directed by John Ford (Fox Films, 1924), DVD (20<sup>th</sup> Century Fox, 2007.)

<sup>22</sup> Kirby, 199-202, 203.

<sup>23</sup> *Ibid*, 203.

<sup>24</sup> *Ibid*, 205.

<sup>25</sup> Sean Axmaker, “The Iron Horse,” Turner Classic Movies website, accessed May 20, 2015, <http://parallax-view.org/2010/07/16/sfsff-2010-the-iron-horse/>.

constantly plague the railroad's construction hindering the progress of democracy and modernity in the western territories.<sup>26</sup>

A story of romance complements the nostalgic views of conquering the uncivil western frontier. A love triangle between the three main characters parallels the idea overcoming corruption and uniting the country. Miriam, daughter of the railroad superintendent, is torn between two suitors: Davy Brandon, the son of a land surveyor whose father was murdered at the hands of Indians while scouting the route for the railroad tracks, and Peter Jesson, who works for her father but is secretly plotting with the local land baron to use his property as the route for the new railroad. The land baron, Mr. Deroux, tells Jesson to kill Brandon while scouting. He fails to kill Brandon who returns to the camp but does not have the heart to tell Miriam what happened. A band of Indians attacks one of the new towns. The railroad workers and locals must fight the natives to secure the land and uphold American ideals.<sup>27</sup>

Brandon eventually goes to work for the rival railroad company and he and Miriam lose contact until they are reunited at the completion ceremony at Promontory Summit. They stand on opposite sides of one another until the last spike is driven, formally uniting the country and their relationship to one another. The pounding of the spike is a metaphor for the consummation of marriage, suggesting the country is now one and can never be broken apart. Miriam, representing the virgin landscape, manages to overcome the manipulative Jesson and choose the heroic railroad surveyor, bringing a

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<sup>26</sup> Kirby, 205-207.

<sup>27</sup> "THE SCREEN: The Railroad Pioneers," *The New York Times* website, August 29, 1924, accessed May 20, 2015, <http://www.nytimes.com/movie/review?res=9A04EFDE163EE233A2575AC2A96E9C946595D6CF>;

happy union to nature and industry. Upon completion of the railroad Davy and Miriam embrace and kiss each other. They run off into the crowd becoming no longer people of the “east” or “west” but purely Americans.<sup>28</sup>

Two years later, Buster Keaton released another period piece entitled *The General* that likewise had its roots in America’s past and portrayed the rail industry as a heroic entity. Unlike *The Iron Horse*, Keaton’s film is a comedy set in the Civil War, based loosely on an actual event, the Great Locomotive Chase of 1862.<sup>29</sup> The constant evolution of steam locomotives caused railroads to invest in new equipment, leaving older equipment for use in films and promotional events. Keaton utilized these leftover locomotives and cars to tell the story of the Great Locomotive Chase in which a group of Union soldiers stole a train outside of Atlanta intending to wreck the Western & Atlantic Railroad of northern Georgia, leaving Chattanooga vulnerable for attack. The plan ultimately failed and became a rallying cry for the southern cause.<sup>30</sup>

Keaton presented the story as a comedy of love and adventure using the dramatics of the chase as a catalyst. He glorified southern, antebellum life and depicted the Yankees as inept military leaders unable to thwart the foolish protagonist aptly named, Johnny Gray. The Union Army is the clear villain in *The General* and southern honor of neighbor and country is held above all else. Johnny’s girl, Annabelle, rejects him when she thinks Johnny had not tried to enlist in the Confederate Army. Only after he saves the day, and

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<sup>28</sup> Kirby, 211-213.

<sup>29</sup> *The General*, directed by Buster Keaton, (United Artists, 1926), DVD (Kino Lorber Films, 2008).

<sup>30</sup> See Russell S. Bonds, *Stealing the General: The Great Locomotive Chase and the First Medal of Honor* (Yardley, PA: Westholme Publishing, 2008).

the South, that she embraces him in a kiss. This portrait of America is similar to the setting of D.W. Griffith's *The Birth of a Nation* (1915). Unlike Griffith however, Keaton presented the railroad as a harmonious partner with nature that does not intrude but becomes part of the landscape.<sup>31</sup> The history of railroads and their role in the lives of everyday people was not confined to films and motion pictures but through the pages of literature as well.

Contemporary authors also reflected on the role of railroads in history and their place in the future. Famed southern writer, William Faulkner, used his personal history to form this transition in his novel *Sartoris* (1929). Faulkner heavily based the history of the Sartoris family on his own family history. Faulkner's great-grandfather, Colonel William C. Falkner, was a Confederate Civil War hero and builder of north Mississippi's Ship Island, Ripley and Kentucky Railroad Company. In addition to managing the railroad, the colonel wrote fictional tales revolving around the railroad that often led to spectacular train chases similar to that in the Great Locomotive Chase. Faulkner created the fictional Yoknapatawpha County in the state of Mississippi as the setting for many of his works. Colonel John Sartoris' dream of a railroad that connected the Mississippi Gulf to the Great Lakes represented his dream of having a united country again.<sup>32</sup>

*Sartoris* revolves around the collapse of the southern aristocracy and the constant struggle with modernization and with defining progress for the southern people. The image of Col. John Sartoris as the local hero Civil War hero and builder of the railroad

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<sup>31</sup> Kirby, 122-130.

<sup>32</sup> Joseph R. Millichap, *Dixie Limited: Railroads, Culture, and the Southern Renaissance* (Lexington, KY: University of Kentucky Press, 2002), 24-27; Don Doyle, *Faulkner's County: The Historical Roots of Yoknapatawpha* (Chapel Hill, NC: University of North Carolina Press, 2001), 91-95.

entraps his descendants into an image of grandeur that they fail to maintain. Bayard Sartoris, the protagonist of *Sartoris*, is struggling to find a place in his family's legacy. At the beginning of the novel, he returns home via the family railroad from the World War I, where he flew planes and participated in dogfights. After experiencing the latest in technology and travel, Bayard finds it difficult to readjust to his hometown. He unintentionally kills his grandfather in a car accident and can no longer stand to live in his ancestral home. Bayard constantly comes and goes from Yoknapatawpha by way of the railroad until he ultimately escapes to the urban environment of Chicago. Bayard's journey comes to an abrupt end when he dies testing experimental aircrafts.<sup>33</sup>

Faulkner continued his nostalgic and ambivalent view of the railroad in *The Unvanquished* (1938), a novel about the Sartoris family during the years of the Civil War and Reconstruction. The book is filled with stories of how the Sartoris family remains "unvanquished" by identifying and thwarting other enemies in the postbellum era. As with *Sartoris*, Faulkner describes the struggle between southern tradition and modernity and ambivalence toward technology through the image of the railroad. Similar to Keaton's *The General*, Faulkner told a version of the Great Locomotive Chase in chapter 3 of *The Unvanquished* titled "Raid." Ringo, one of the Sartoris' slaves, accompanies Bayard and his grandmother on a trip to visit family. Ringo is enthralled about the railroad after hearing stories of the tracks and locomotives and wants nothing more than to witness it first hand. Upon arrival, they find the railroad destroyed by the Northern Army. All that remains are the ashes of the burnt wooden ties and the steel rails twisted

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<sup>33</sup> Millichap, 28-30.

around trees similar to how “you knot a cornstalk around a wagon stake.”<sup>34</sup> Bayard’s cousin, Drusilla, tells the party the story of the Great Locomotive Chase. In Faulkner’s version, the southerners stole a locomotive after the Fall of Atlanta and traveled up the line to Chattanooga with a train full of “Yankees” in hot pursuit. Faulkner related the chase to a “meeting of two iron knights of the old time” harkening back to a nostalgic view of honor in medieval Europe to comfort the people of the war torn south.<sup>35</sup> Drusilla explains that the success of the chase was short lived since the Northern Army destroyed the railroad, “so we couldn’t do it again.”<sup>36</sup> For the Sartoris family, the only redemption was to rebuild the railroad thereby rebuilding the economy and become the beacon for the new power in southern aristocracy.

The construction of the railroad through Yoknapatawpha County symbolized the return of prosperity and progress to the former Confederate states. Faulkner described the first train’s arrival to Yoknapatawpha County in the 1870s with “speeches at the station, with more flowers and a Confederate flag and girls in white dresses and red sashes and a band...”<sup>37</sup> Colonel Sartoris, the patriarch and local hero, sits in the cab of the locomotive replacing his horse from the war with the iron horse of Reconstruction. He enthusiastically blows the whistle while Mr. Redmond, his former business partner, stands at ground level showing, according to Millichap, the Colonel’s social and

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<sup>34</sup> William Faulkner, *The Unvanquished*, (New York: Random House, 1934), 100.

<sup>35</sup> *Ibid*, 111.

<sup>36</sup> *Ibid*, 112.

<sup>37</sup> *Ibid*, 260.

economic superiority over his literary foil.<sup>38</sup> Redmond later murders Colonel Sartoris and then catches a train out of town. The mode that brought the Colonel much respect and admiration also carried his killer away from justice.

The films and literature in the early twentieth century primarily use the train or railroad as a backdrop or setting to tell a story. The progression of the twentieth century brought new public respect and admiration for the railroads and, consequently, the railroad workers themselves. The image of the trains became just as important, if not more, than the men who operated them.

### Operations & Trains

The romance of train travel was not limited to the adventures of the passengers but extended to those who were employed by the railroad as well. Railroad workers and the trains themselves occupy most of what the public knows and simultaneously does not know about the railroad industry. Trains were the public vehicles people rode on with little knowledge about how they operated and who operated them. Film, mass literature, and songs of the first half of the twentieth century opened up that unknown world to the public through stories and depictions of brave railroad workers that glorified both the job and the equipment that operated on America's railroads.

One of the most glorified and remembered aspect of American railroading is the image of the steam locomotive. Steam locomotives have always captivated the minds of passers-by with the amount of mechanics and physics it takes to create its forward

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<sup>38</sup> Millichap, 31-33.

motion. Unlike most steam engines that were contained within the confines of factories, the locomotive was there in the public eye on every train that moved across the country for more than a century. The mechanics of the cylinder, rods, and wheels along with the levers, pipes, and gauges in the locomotive's cab created a labyrinth of technology barely comprehensible to the novice passenger. This knowledge of how a steam locomotive actually operated was reserved to engineers--both the men that designed the trains and the men who operated them.<sup>39</sup>

Engineers became heroes in the nineteenth century, putting their lives on the line everyday to handle the steam-pressured boiler that could explode if not maintained or run properly. Railroads operated on a strict time schedule constantly receiving messages from various station agents regarding the status of other trains using the same track and with instructions on when to pull off to let the other go by. Falling behind or missing a train order could mean disaster for the engineer, his train, and those on board. Working for the railroad became a source for many stories and adventures that captured the imagination of many adolescent boys and girls who watched a train go through their hometown. Boys grew up to be engineers, managers, or even railroad executives while girls grew up without those opportunities.<sup>40</sup>

Women were limited to very few types of jobs with the railroad, mainly secretarial or service positions, that prevented them from promotion or physically working on the locomotives themselves. By the 1920s however, of the 74,000 telegraphers who worked in the railroad industry only a little more than 2,500 were

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<sup>39</sup> Grant, 1-3.

<sup>40</sup> Stilgoe, 144-145.

women. Telegraphers were placed at various depots and stations communicating among the other telegraphers to ensure the efficient operations and safety of the trains and their passengers.<sup>41</sup>

Filmmakers wanting to appeal to the female audience began making adventure serials that featured women as the lead, demonstrating “fantasies of female mastery and empowerment.”<sup>42</sup> The longest running serial of this kind was *Hazards of Helen* that ran from 1914 to 1917 with 119 episodes. Helen was a telegrapher for the railroad and each week had to work to avert disaster and save the railroad company. Runaway trains, bandits, and saboteurs resulted in Helen jumping off bridges onto speeding trains or even driving the train herself if the engineer was incapacitated. One episode entitled “The Wild Engine” showed Helen, upon receiving word of a runaway engine headed for two passenger trains, doing whatever necessary to stop the engine including breaking social norms for women. Helen hopped on a motorcycle and drove off the end of a drawbridge to tell the bridge operator about what had happened. She then hopped in the cab of a locomotive to chase down the runaway and bring it to a stop.<sup>43</sup>

Helen showed she was just as capable as any man of doing the physical labor required for railroad operations. But, in spite of her heroism, she was always limited to the role of station agent. *Hazards of Helen* linked the traditional woman with the progressive or “new” woman. Lynne Kirby explains, “To make Helen the engineer would

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<sup>41</sup> Grant, 5-8, 112.

<sup>42</sup> Kirby, 111.

<sup>43</sup> Kirby, 111-113; “The Wild Engine,” *Hazards of Helen*, 1915, Kalem Company, accessed June 18, 2015, [https://archive.org/details/hazards\\_of\\_helen\\_wild\\_engine](https://archive.org/details/hazards_of_helen_wild_engine).

have been too feminist; but to allow her occasional opportunities to display cleverness, competence, resourcefulness, and physical agility... gesture[s] toward a more 'modern' woman and to underscore[s] the unusualness of the gestures."<sup>44</sup> With this technique, filmmakers were able to bend gender norms and promote the role of a more modern woman.

*Hazards of Helen* was one of many films that depicted the inner workings of a railroad during this era. Films and popular literature focused on the lives and jobs of railroad workers where their home and work lives were always intertwined. The RKO motion picture *Danger Lights* (1931) combined the dramatics of the railroad workers and their personal lives into one feature. Similar to earlier train films, it contained the story of a love triangle between Mary and two railroaders: Dan Thorn, the superintendent of the railroad, and Larry Doyle, a locomotive engineer turned hobo who has been recruited to return to running trains.<sup>45</sup>

The innovation of audio technology brought a new sense to the films that prominently featured trains. The sounds of a steam locomotive provided a new component of realism that made the railroad no longer a setting but an additional character in the narrative. In *Danger Lights*, the filmmakers selected an electrified portion of the Milwaukee Road's tracks through Montana as the site for filming, but decided to use traditional steam locomotives rather than the newer, electric locomotives. The sight and sound of steam locomotives provided more dramatics and familiarity than the whirl of

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<sup>44</sup> Kirby, 114.

<sup>45</sup> *Danger Lights*, directed by George B. Seitz (RKO films, 1931), DVD (2009); Mordaunt Hall, "THE SCREEN: A Railroad Thriller" *New York Times* website, December 15, 1930, accessed May 20, 2015, <http://www.nytimes.com/movie/review?res=9407E6DF163BE433A25756C1A9649D946194D6CF>.

electric engines.<sup>46</sup> Throughout the movie, railroad obligations constantly interrupted the personal moments between Mary, the heroine, and her love interests. Ultimately, Thorn is injured while saving Doyle whose foot has been caught in an automated electric switch track. Thorn frees Doyle but is struck by an approaching train in the process. Doyle rushes Thorn to the nearest hospital for surgery via a special train assigned just for the trip. Thorn lives and he gives his blessing for Mary to be with Doyle so he can return to his one true love: the railroad.<sup>47</sup>

Films like *Danger Lights* that featured the working and personal lives of railroad laborers gave the public a perspective on the relatively unknown world of railroad operations. The average passenger had no idea about the inner workings of locomotive mechanics or traffic logistics. The interest in this industrial field was enough to warrant its own magazine. The *Railroad Men's Magazine* emerged in 1906 as a monthly periodical to share personal and fictional experiences from the railroads. The publishers called upon actual railroad workers to submit personal stories from their duties on the rails. Fictional accounts complemented the true accounts providing a range of stories emphasizing the dangers and adventures of railroad work. After an abrupt ten-year hiatus, a new publisher brought back the magazine retitled *Railroad Stories* in 1932. The new generation of the magazine catered to a wider audience and not simply railroad employees. The publishers realized new generations of young men and those just interested in the rail industry would pick up yearly subscriptions.<sup>48</sup>

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<sup>46</sup> Stilgoe, 258-259

<sup>47</sup> Stilgoe, 259-261; Hall, "THE SCREEN: A Railroad Thriller."

<sup>48</sup> Freeman Hubbard, "The RAILROAD Heritage," *Railroad Magazine* (September 1979), 32-33.

Within the some two hundred pages of each edition of *Railroad Stories* were daring tales of near collisions, famous railroaders, and tales of the quirky and weird. The magazine also started to add sections for the growing number of railroad fans who subscribed for both modeling and train identification purposes. In 1937, the magazine's title changed to *Railroad Magazine* and continued the practice of including both true and fictional stories and sections that promoted railroad hobbies. The publication not only acted as a source for good stories and interesting articles about American railroads, it acted as a club for non-railroad workers to share their own stories and experiences with trains. The magazine's advertisements were tailored to men, promoting hair growth methods and medicine for prostate sufferers. Increasingly, however, female railroad fans began to contribute to the personal section in which readers updated each other about local sightings or personal stories of their affinities for railroads.

In 1914, *Railroad Man's Magazine* asked its readers to rank their favorite railroad song and poems. Among them were "Casey Jones," "The Dying Hobo," and "Down in the Lehigh Valley." These represented some of the more famous turn-of-the-century songs that featured trains as the principal theme or crude songs sung by railroaders to pass the time while on the job. The songs focused on railroad workers who died on the job or trains being the vehicle of a somber situation as in "He's Coming to Us Dead" where the train brings home a deceased loved one, or "East bound train" about a girl going to visit her imprisoned, blind father with no means to pay for the fare. These songs

were passed along orally and could be changed based on the region and railroad but they mostly retained their depressing nature of lost love and continued despair.<sup>49</sup>

The hillbilly song movement of the 1920s brought these folk songs to a broader audience and quickly grew in popularity. The early train songs continued the somber stories of lost life and hoboes that matched the same bleakness of the Great Depression era. The turning point came for the subject matter of railroad songs in 1936 when Roy Acuff recorded an old hobo ballad, “The Wabash Cannonball” but glorified train travel rather than the hobo life. Originally, the *Wabash Cannonball* was a fictitious train equivalent to the *Flying Dutchman* for sailors. Whenever a hobo passed on, according to legend, the *Wabash Cannonball*, a train of mythic size and proportions, would take the hobo to the afterlife forever riding the rails from one end of the country to the other.<sup>50</sup>

As the song passed from singer to singer, lyrics were changed and eventually the hobo references faded away. This evolution altered the song from being a tune about the hobo afterlife to a song glorifying railroads and embracing train travel. The chorus of “The Wabash Cannonball” is devoted to the majestic sight of the train moving across the landscape and the joy that comes from listening to its sounds:

Listen to the jingle, the rumble and the roar,  
As she glides along the woodland, through the hills and by the shore,  
Hear the mighty rush of the engine hear the lonesome hobos call  
You're traveling through the jungle on the Wabash Cannonball<sup>51</sup>

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<sup>49</sup> Norm Cohen, *Long Steel Rail: The Railroad in American Folksong* (Urbana, IL: University of Illinois Press, 1981), 41-45.

<sup>50</sup> Cohen, 374-376.

<sup>51</sup> Roy Acuff, *50 Songs Grand Ole Opry Edition: Song Book No. 4*, “Wabash Cannonball,” 04466, written 1936, (Nashville, TN: Acuff-Rose, Inc., 1944).

The train's ability to run over every terrain carries on the ideology of the railroad's ability to overcome any obstacle, natural or man made to reach the destination. Some aspects of the original song still exist including the mention of a "jungle" that initially referred to a hobo camp on the outskirts of a town but in later versions implied that the train could carry the passengers safely through the dangers and mysteries of the unknown outside the train. The success of the "Wabash Cannonball" and other songs spurred other genres and musicians to write train-inspired music.

One of the reasons musicians were attracted to trains was the ability to recreate the sounds of a steam locomotive through their instruments. Early blues songs incorporated the harmonica to recreate the locomotive's whistle similar to how country and hillbilly musicians used the fiddle for their songs. Recreating the sounds of a steam train gave the song a more realistic edge while also showcasing the skill of the instrumentalist.<sup>52</sup> Train songs were not limited to just country and blues but the influence of speeding trains reached every genre of music.

Duke Ellington's "Daybreak Express" (1933) masterfully gives the listener the experience of an express train's journey within four minutes. The inspiration for the song came after Ellington and his orchestra toured the Southern United States. Ellington aimed to recreate the mechanical sounds of the steam locomotive emphasizing the train's whistle. Unlike most of his songs, "Daybreak" was fully written and left no room for improvisation from his supporting ensemble. Using the drums and brass section, the ensemble recreates the sounds of a train starting from a dead stop with the steam pushing

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<sup>52</sup> Cohen, 649-650.

through the cylinder to drive the pistons to turn the wheels. The train quickly gathers speed with the trumpets taking control like the engineer. The tempo drops off and the musical train gradually slows to a stop.<sup>53</sup> Ellington masterful instrumental brings the sensory experience of riding an express train to everyone including those who were unable to experience it first hand.

Express trains were reserved for those that could afford the higher ticket prices. They made fewer stops than the local trains and often excluded commuters or lower classes. Those who had the ability to ride on the express train were treated with speed, luxury, and constant service from the onboard group of African American porters.<sup>54</sup> In the face of new modes of transportation, railroads were forced to update their equipment and bring new life to their crack passenger trains in order to retain their place as the premiere way to travel.

Between 1929 and 1932, American railroad lost a third of their passenger revenue to more modern modes of transport, mostly the automobile. The introduction of new streamlined trains reinstated railroads as a technologically advanced industry. Railroads relied on steam engines to power their trains for more than a century but in the face of new transportation alternatives, they needed to adapt. In 1933 Ralph Budd, president of the Chicago, Burlington, & Quincy Railroad, sought out a completely revolutionary, redesigned train that had the ability to rejuvenate the ailing passenger revenue for his railroad. His collaboration with Edward Budd of the Budd Manufacturing Company

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<sup>53</sup> Duke Ellington, "Daybreak Express," by Duke Ellington, *Early Ellington (1927-1934)* recorded 1933, RCA/BMG 6852-2-RB, 1993, CD; Stanley Dance, *The World of Duke Ellington*, (Boston: Da Capo Press, 2000), 85, 273.

<sup>54</sup> Theodore Kornweibel, Jr., *Railroads in the African American Experience*, (Baltimore, MD: John Hopkins University Press, 2010), 120-125.

produced the first streamlined, lightweight mainline train in the country. Budd went against the industry standard of steam power, deciding to invest in the new diesel-electric technology.

The end result was an efficient and aesthetically pleasing machine that looked like no other train in the world. The polished stainless steel sidings with art deco designs created a futuristic look that shined in the sun and was a striking contrast to the bulky, dirty steam locomotives that had become the standard for train propulsion. Budd christened the new train the *Zephyr* after the mythical god of westerly winds to symbolize the new streamliner traveling through the western railroad's territory. Upon completion, the *Zephyr* traveled to thirty different cities attracting almost 380,000 people to the public exhibitions for a glimpse of the latest in rail technology. Thousands more lined the track to witness this "silver streak," as it came to be known, pass by en route to its next public display.<sup>55</sup> Within a year other railroads followed the new trend and ordered their own streamliners and updated older equipment.

Eastern railroads in proximity to coal mines were hesitant to fully invest in the new diesel technology and instead streamlined their steam locomotives. New competition emerged among railroad companies over who could generate the sleekest design. Rival railroads New York Central and Pennsylvania hired famed industrial designers Henry Dreyfuss and Richard Lowery respectively to update their premiere passenger trains to the streamlined look. Railroad historian Christian Wolmar describes the streamliners as, "beautiful behemoths, a source of pride and modernity in an era of economic struggle and

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<sup>55</sup> Richard Overton, *Burlington Route: A History of the Burlington Lines* (New York: Alfred A. Knopf, 1965), 380-382; Geoffrey H. Doughty, *Burlington Route: The Early Zephyrs* (Lynchburg, VA: TLC Publishing, 2002), 5-8, 14-20.

austerity. The size and power of the elegant diesels seemed to epitomize American values and gave people something to celebrate.”<sup>56</sup> The investments in the new trains paid off as America railroads recouped some of their losses in passenger revenue earning \$442 million in 1939. The surge and success of the streamliners also led to a wave of new design in appliances, buildings, and cars with the streamlined, art-deco style. Other railroads followed the model of Ralph Budd and sent their new streamliners out on public exhibition campaigns to give people a chance to see and experience modern technology and travel. One such exhibition inspired one of the greatest train songs ever recorded.<sup>57</sup>

The Seaboard Air Line Railroad inaugurated its premiere Pullman train the *Orange Blossom Special* in November 1925. Trains on this new route carried passengers from New York southward all the way to Miami. In 1938, the Seaboard decided to update the motive power for the *Special* by replacing the aging steam locomotives with modern, streamlined diesel engines. The company purchased nine diesel-electric locomotives that could be separated into three sets of three units with 6,000 pounds of horsepower per set. The company scheduled an exhibition tour to showcase the new engines throughout its system. It started in Washington D.C. on October 31, 1938 and moved south for the next two weeks. Tens of thousands of people ventured out to view the new *Orange Blossom Special* because, to the public, “this train, and others like it were viewed as much more

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<sup>56</sup> Christian Wolmar, *The Great Railroad Revolution: The History of Trains in America* (New York: Public Affairs Books, 2012), 313.

<sup>57</sup> Karl R. Zimmerman, *20<sup>th</sup> Century Limited* (St. Paul, MN: MBI Publishing, 2002), 74-75; “Streamliners-Six Years Later,” *Business Week*, February 10, 1940, 47.

than machines, elevating the collective spirit in a way that no other industrial or scientific advance, with the possible exception of spacecraft, ever had or ever would.”<sup>58</sup>

At one of the public displays, a young fiddler named Ervin T. Rouse saw the train and was instantly transfixed by its style and beauty. Rouse wanted to write a song that matched the awe-inspiring sight of seeing the new streamlined locomotives. Along with fellow bluegrass musician Chubby Wise, he co-wrote the song that became the fiddle player’s official anthem. The extremely quick tempo of the song recreates the speed of the *Orange Blossom Special* with its brand new locomotives. Lyrics came later that again brought the theme of romance-“It’s the *Orange Blossom Special*, a-bringin’ my baby back” and new beginnings-“Goin’ down to Florida, and get some sand in my shoes, I’ll ride the *Orange Blossom Special*, and lose these T.B. Blues.”<sup>59</sup>

In spite of the song being inspired by the new diesel technology, Rouse kept the sounds of a steam locomotive as a prevalent part of the song. The tune opens with the fiddle player recreating the classic sound of a steam whistle before exploding into the fast tempo rhythms of the rest of the song. The modern inspiration with the traditional undertones symbolizes the role of the railroad in the country. People responded to the new diesel technology but still had a fondness for steam engines.

With the success of Acuff’s *Wabash Cannonball* and Rouse’s *Orange Blossom Special*, songs continued to appear that glorified the train and train travel experience. To people living in the country, a passing train represented a chance at a new life in a new place. Hank Williams grew up in Alabama and watched the Louisville & Nashville’s *Pan*

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<sup>58</sup> Randy Noles, *Orange Blossom Boys: The Untold Story of Ervin T. Rouse, Chubby Wise and the World’s Most Famous Fiddle Tune* (Anaheim Hills, CA: Centerstream Publishing, 2002), 25-27.

<sup>59</sup> Noles, 75-77.

*American* express train charge past on its way to New Orleans. He wrote a song in 1948 entitled “*Pan American*” about the train that inspired him as a child:

I have heard your stories about your fast trains  
But now I'll tell you about one all the southern folks have seen  
She's the beauty of the southland listen to that whistle scream  
It's that Pan American on her way to New Or-leans.<sup>60</sup>

The northeastern railroads were well known for their luxurious passenger trains, such as the New York Central’s *Twentieth Century Limited* and the Pennsylvania’s Railroad *Broadway Limited*, and Williams wanted the listening audience to know that the trains of the South were just as good as those up North. The song acts as a giant promotion for southern tourism, urging the listener to “feel the southern breeze” and to visit all of the cities along the route, “There’s Louisville, Nashville, Montgomery the cap’tal of Alabama, you’ll pass right through them all when you’re New Or-leans bound.”<sup>61</sup>

Another lyric “when she passes the Nashville tower, you can hear that whistle whine” alludes to the *Pan American*’s fame on the radio.<sup>62</sup> As the train passed through Nashville, WSM Radio, home of the Grand Ole Opry hour, broadcasted the locomotive’s whistle over its airwaves to the thousands of radios and listeners at their respective homes. This practice started in 1922 and extended through the 1940s. Though they were not physically on board the train, listeners could pretend they were a part of the group of people headed down to New Orleans. Similar to the *Orange Blossom Special*, however, by the time Williams wrote the song, the L&N had substituted their steam locomotives

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<sup>60</sup> Hank Williams, “*Pan American*,” (Nashville, TN: Acuff-Rose Publications, 1948).

<sup>61</sup> Ibid.

<sup>62</sup> Ibid.

with new diesel-electric engines on the *Pan American*. When this occurred, WSM played a recorded version of the old locomotives rather than record the newer, less dramatic diesel sounds.<sup>63</sup> Railroads continued to struggle to keep their image as a modern, efficient mode of travel. Streamliners improved the aesthetics of the industry but more had to be done to convince people to choose the rails over the roads.

### Importance of Rail Travel

For much of their existence, railroads did not emphasize scenery or the journey as reasons to travel by rail. In the face of true competition, however, the rail industry used the power of place and the adventure of travel to reinforce why the public should take the train and why railroads still mattered. Railroad companies aspired to counter their image as an aging mode of travel with the idea that the deluxe Pullman trains were still the premiere way to travel long distances. The importance of the journey in train travel emerged through the culture and media of the 1930s and 1940s. The rail industry's marketing campaigns and contemporary literature elevated the importance of the journey. One of the more prominent forms of marketing was the imagery the companies incorporated into their promotional materials.

Travel posters captured the imagery and allure of rail travel that could not be communicated through the text in periodical advertisements. Posters depicted the exotic

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<sup>63</sup> Jerry Fox, "The Grand Ole Pan-American," *Classic Trains Magazine* (December 1993): 73-75.

destinations that passengers could visit if they only bought a ticket.<sup>64</sup> Major railroads contracted artists to create posters that would lure onlookers to discover the world of trains for themselves.

Railroads first used posters as advertising media to relay a visual sense of the new technology. The original railroad posters combined the information-heavy circus posters with the imagery of the French decorative art posters of the 1860s to form a hybrid that informed the onlooker of schedules, destinations, and fares in an aesthetically pleasing manner. As time went on, the posters lost their informational purposes and focused more on evoking the romance of trains and the landscape.<sup>65</sup> The artwork was contracted to various artists who captured the allure of travel through the latest techniques in the art world. The posters were displayed primarily in ticket offices and in store windows to capture the attention of passers-by, seducing them into a world only available by way of the train.

This tendency to focus on adventure and scenery in marketing train travel continued into the 1930s as railroads heavily promoted the full tour experience in the wake of falling passenger revenue.<sup>66</sup> Railroads continued to rely on graphic artists

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<sup>64</sup> Carlos Schwantes, *Railroad Signatures across the Pacific Northwest*, (Seattle, WA: University of Washington Press, 1993), 193-196.

<sup>65</sup> John E. Gruber and Michael E. Zega, *Travel by Train* (Bloomington, IN: Indiana University Press, 2002), 1-3.

<sup>66</sup> This section analyzes the how railroads marketed themselves to tourists and travelers rather than its history with the tourism industry. There is an extensive amount of literature on the connection between railroads and the growth of American tourism. See Marguerite S. Schafer, *See America First: Tourism and National Identity* (Washington D.C.: Smithsonian Institution Press, 2001); John F. Sears, *Sacred Places: American Tourist Attractions in the Nineteenth Century* (New York: Oxford University Press, 1989); Reiko Hillyer, *Designing Dixie: Tourism, Memory, and Urban Spaces in the New South* (Charlottesville, VA: University of Virginia Press, 2014); Richard D. Starnes, ed. *Southern Journeys: Tourism, History, and Culture in the Modern South* (Tuscaloosa, AL: University of Alabama Press, 2003); Susan Sessions Rugh, *Are We There Yet?: The Golden Age of American Family Vacations* (Lawrence, KS: University of Kansas

because color photography was still in its infancy and could not capture the rich colors and shadowing that enticed people to see the wonders of nature for themselves. A 1936 poster for the Burlington Route, Great Northern, and Northern Pacific Railroads advocated the all-inclusive tickets of train fare, hotel, and escorted tours of the various parks and resorts as “Vacations Without a Care” (Fig. 1) The poster gives the onlooker the perspective of being on the porch of a resort lodge looking at the grand mountainous landscape as people gather into an automobile for a tour of the park. This one poster combined all of the benefits of traveling with the railroad into one visual component.<sup>67</sup>

A brochure cover for the Great Northern puts the reader with seated passengers aboard a luxury Pullman car complete with fine wood details looking out onto the mountainous terrain. Similar to the efforts of the Atchison, Topeka, & Santa Fe Railroad’s promotion of Native American culture, the artist added Indian teepees giving the reader the idea that they might still see a representation of the Wild West in the modern world. (Fig. 2)<sup>68</sup> These materials gave the impression that Americans could experience the same natural, untouched wilderness their predecessors experienced as they trekked across the west on Conestoga wagons. In reality twentieth century travelers experienced a world completely designed and built by industrialists that catered to the upper social classes.

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Press, 2008); Leah Dilworth, *Imagining Indians in the Southwest: Persistent Visions of a Primitive Past* (Washington D.C.: Smithsonian Institution Press, 1996).

<sup>67</sup> Burlington Route, “Escorted Tours” (poster), 1935, accessed November 7, 2013, <http://digitum.washingtonhistory.org/cdm/ref/collection/ephemera/id/126>.

<sup>68</sup> Great Northern Railroad, “From the Car Window” (brochure), 1933, accessed November 7, 2013, <http://digitum.washingtonhistory.org/cdm/ref/collection/ephemera/id/22>.

Eastern railroads also produced travel posters but focused on the urban and industrial environment the rail industry helped create. The New York Central Railroad started their poster movement in 1928 to visually assert their role in the world and publicize the cities they served. The company commissioned Leslie Ragan to paint a series of marketing posters. Initially, he painted watercolor cityscapes that interplayed light and shadowing with the tall skyscrapers giving them a dreamlike quality (Fig. 3 & 4). Ragan aimed to give viewers new perspectives of well-established cities enticing them to return or venture there for the first time. The poster of Rockefeller Center portrays the tower from above; a view not typically seen by the person looking up from the sidewalk. The image of the trains themselves is largely absent from Ragan's early work. He preferred, rather, to highlight both the natural and industrial landscapes found along the route of the New York Central. His posters proved to be so popular that the railroad hosted a public exhibition of his work on the east balcony of Grand Central Terminal in New York City.<sup>69</sup>

The streamliner era brought a new focus to railroad travel posters as the futuristic trains took center stage in the advertising media. The companies wanted everyone to know that they had the latest in rail equipment and could move faster than ever before. Artists created dynamic images of streamliners that emphasized their aerodynamic design, giving the viewer a sense of speed. The New York Central again commissioned Leslie Ragan to capture the latest in rail technology. He painted a diagonal view of a speeding *20<sup>th</sup> Century Limited* for a poster advertising the new travel time of sixteen hours from

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<sup>69</sup> Gruber, 95-97.

New York to Chicago (Fig. 5). He blurred the mechanics and gadgetry on the sides of the locomotive and focused on the distinctive crescent-shaped prow on the front of the locomotive that cut through the air as it sped along the Hudson River.<sup>70</sup> Another poster entitled “For the Public Service,” incorporates Ragan’s earlier industrial landscapes and the streamliners in one visual component (Fig. 6). A fleet of New York Central engines, both steam and diesel-electric, idle outside of Chicago’s LaSalle Street station. Again, Ragan gives a different perspective of the city, this time from track level, the perspective of travelers coming in and out of Chicago on the Central’s trains. He intentionally blurs the lines where the smoke meets the sky, making the trains seem as natural to the landscapes as the clouds themselves.<sup>71</sup>

The trains depicted in Ragan’s and other posters captured a world of luxury and service only available to the wealthiest that could afford its higher fares. The competition between rival railroads heavily manifested itself in the race for the nicest deluxe express trains. This competition grew especially between the New York Central’s *Twentieth Century Limited* and the Pennsylvania Railroad’s *Broadway Limited*, both of which made overnight trips from New York to Chicago. Each company spared no expense. All of their Pullman cars were outfitted with rich mahogany. And each train provided five-star service and served five-course meals on the dining car that could rival any modern hotel.

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<sup>70</sup> Ibid, 109-111, 124.

<sup>71</sup> Gruber, 125.

## Figures

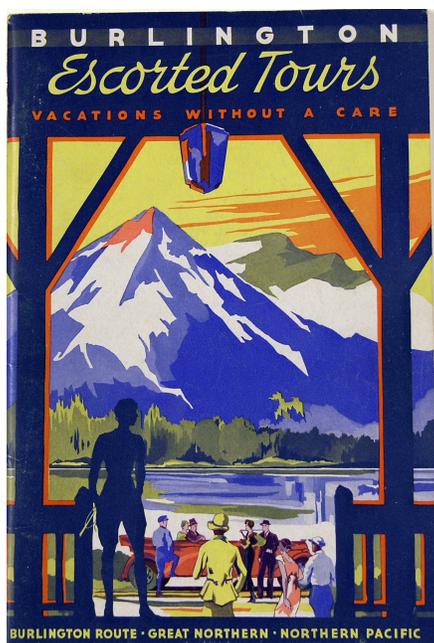


Figure 1. Burlington Route, "Escorted Tours," 1935. Special Collections, Washington State Historical Society.

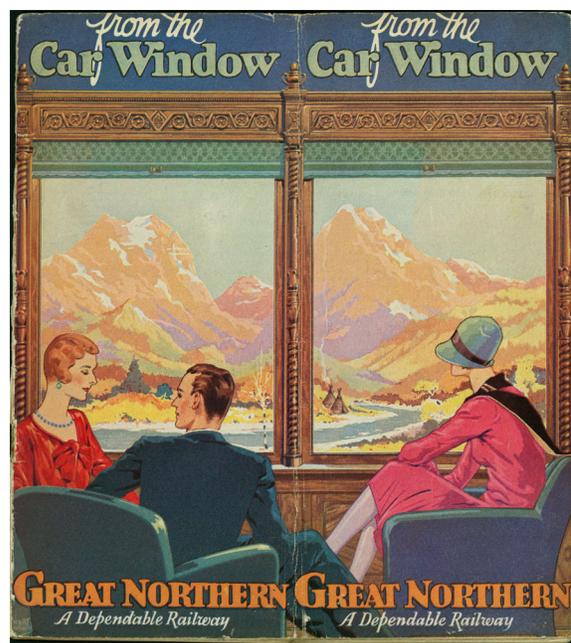


Figure 2. Great Northern, "From the Car Window," 1933. Special Collections, Washington State Historical Society.

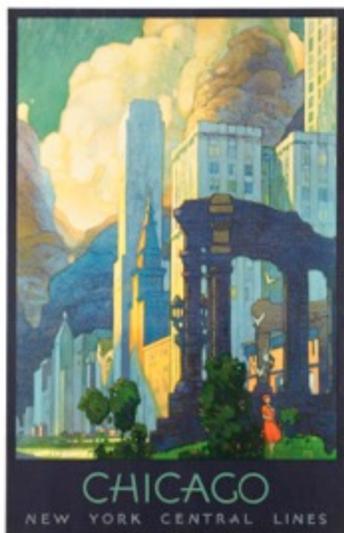


Figure 3. Leslie Ragan, "Chicago," 1929. [www.streamlinermemories.info](http://www.streamlinermemories.info)

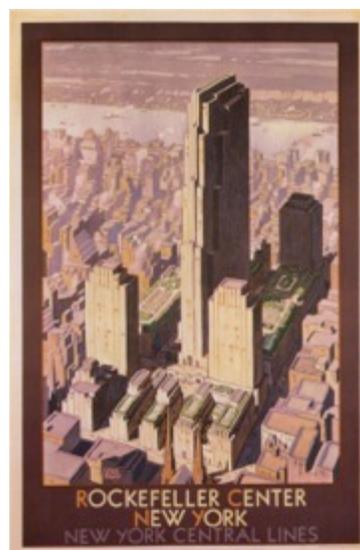


Figure 4. Leslie Ragan, "Rockefeller Center," 1936. [www.streamlinermemories.info](http://www.streamlinermemories.info)

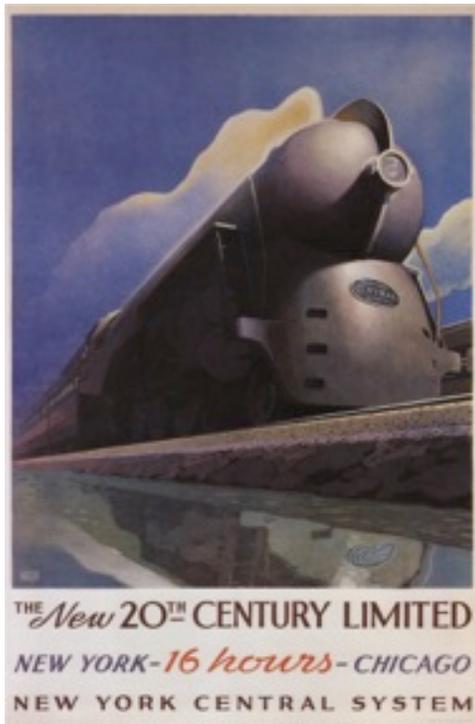


Figure 5. Leslie Ragan, "20<sup>th</sup> Century Limited," 1939. [www.streamlinermemories.info](http://www.streamlinermemories.info)

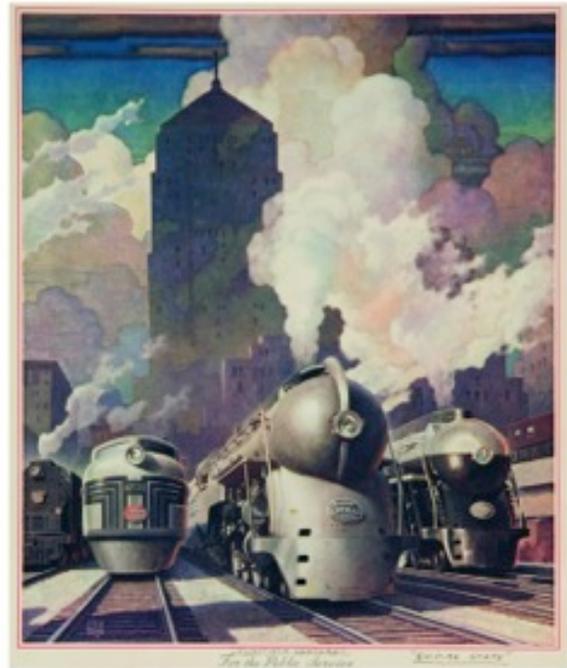


Figure 6. Leslie Ragan, "For the Public Service," 1946. [www.streamlinermemories.info](http://www.streamlinermemories.info)

These trains often carried actors and celebrities back and forth between the two theater metropolises. The *Century* went as far as to put down a red carpet for the passengers as they entered and exited the train at Chicago and New York.<sup>72</sup>

These express trains also formed the setting for many romantic films in the thirties and forties. Two movies followed the two crack express trains of the day, “*Twentieth Century*” came out in 1934 and “*Broadway Limited*” followed in 1940. Each movie follows a female celebrity and a male in managerial role, attempting to meddle with her image and future. Most of the filming occurred on board the respective trains as they traveled from Chicago to New York. The timed journey brought tension to the two plots, as the audience wondered how everything would be resolved by the time the train reaches its destination.<sup>73</sup>

At the same time, contemporary authors used the setting of deluxe trains and Pullmans to tell stories of mobility and self-reflection. Famed American author Thomas Wolfe believed that the train magnificently represented freedom, movement, and the spirit of America. Train travel was a persistent theme in all of Wolfe’s works as his characters are propelled through the various stages of life by way of the railroad.<sup>74</sup> Wolfe’s first novel, *Look Homeward, Angel* (1929), follows the adolescence and formative years of Eugene Gant, an autobiographical version of Wolfe. One of Gant’s

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<sup>72</sup> Stilgoe, 51-55.

<sup>73</sup> *Twentieth Century*, directed by Howard Hawks (Columbia Pictures, 1934), DVD (Sony Pictures, 2005); *Broadway Limited*, directed by Gordon Douglas (United Artists, 1941), DVD (Alpha Video, 2012).

<sup>74</sup> Richard Walser, “Thomas Wolfe’s Train as Symbol,” *The Southern Literary Journal* 21, no. 1 (Fall 1988), 3-4, accessed March 25, 2015, <http://www.jstor.org/stable/20077938>.

first encounters with the world outside of his hometown of Altamont is his journey to the 1904 St. Louis World's Fair. In his youthful state, Gant is simultaneously entranced and frightened by the locomotives he encounters. Gant's ambivalence toward the machine is manifest when he visits the locomotive exhibit: "Once in a huge building roaring with sound, he was rooted before a mighty locomotive, the greatest monster he had ever seen, . . . The scene burned in his brain like some huge splendor out of Hell: he was appalled and fascinated by it."<sup>75</sup> Gant's subsequent train rides take him on "wonderful flights from reality," but always end in frustration and dismay. His unsuccessful first romantic experience with a girl is paralleled by the train's hardship in climbing the steep grade that stands in the path to Charleston, South Carolina.<sup>76</sup> In spite of all of this despair, Gant loves the sight of trains remarking how they are "as beautiful as any ship" after he goes to work for the shipping industry.<sup>77</sup>

Wolfe continues the railroad imagery in the posthumously published novel *You Can't Go Home Again* (1940) about George Webber's journey to find his place in the world after he alienates himself from everyone in his hometown. Webber takes the train from New York City to North Carolina for his aunt's funeral. While at the enormous Pennsylvania Station on Manhattan Island, Webber realizes, "For [at railroad stations], as nowhere else on earth, men were brought together for a moment at the beginning or end of their innumerable journeys, here one saw their greetings and farewells, here in a single

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<sup>75</sup> Thomas Wolfe, *Look Homeward Angel*, (New York: Scribner Publishing, 1929), 46.

<sup>76</sup> Millichap, 40-43.

<sup>77</sup> Wolfe, *Look Homeward Angel*, 426.

instant, one got the entire picture of the human destiny.”<sup>78</sup> While Webber is on board the train, he reflects on the train as a product of human nature, “The train itself is a miracle of man’s handiwork, and everything about it is eloquent of human purpose and direction.”<sup>79</sup>

When Webber ventures to Europe to experience the lives and culture of people on a different continent, he compares the trains he rides to their American counterparts.

Toward the end of his European adventure, Webber comments how the German engine “was beautifully streamlined for high velocity,” and how “every line of this intricate and marvelous apparatus bore evidence of the organizing skill and engineering genius that had created it.”<sup>80</sup> While Weber is waiting for the Belgian engine that will take the train through to Paris, German officials come and remove one of the passengers from Webber’s compartment claiming he is a Jewish man running away with money. He is removed from the train and Webber watches as the train continues on its way with one less passenger. Wolfe traveled to Germany several times during the 1930s and witnessed the rise of the Nazi Party. He used his literary works to warn his readers of the dangers of fascism if it were not contained. The German train’s loss of the Jewish passenger counters the unrestricted freedom of those on board American trains.<sup>81</sup>

The urban landscape in Ragan’s paintings and the travel narratives in Wolfe’s novels connected railroads with the urban and industrial world. Railroads brought the

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<sup>78</sup> Thomas Wolfe, *You Can’t Go Home Again* (New York: Harper & Row Publishing, 1940), 48.

<sup>79</sup> *Ibid*, 55.

<sup>80</sup> Wolfe, *You Can’t Go Home Again*, 691.

<sup>81</sup> For Wolfe’s feelings towards German politics see Leslie Field, “Thomas Wolfe’s Attitudes toward Germany and Jews,” *Journal of Modern Literature* 11, no. 1 (March 1984), 183-5, accessed June 18, 2015, <http://www.jstor.org/stable/3831161>; Walser, 5-6.

urban environment with them no matter where they went. Historian John R. Stilgoe refers to the built environment along the railroads' right-of-ways as the "metropolitan corridor" that gave even the most remote town with railroad access an idea of the hustle and bustle of city life.<sup>82</sup> Railroads were symbols of metropolitanism with their mechanization and high-class life reserved for the few.

In addition to the mainline railroads and their large terminal buildings, each major city had a network of subways, intra-urban trains, and elevated railways to aid in the mobility of city dwellers. These trains focused more on efficiency and quantity rather than luxury and quality. The trains in urban environments helped set the rhythm of everyday life. Rural areas may have had two trains a day at most while in the cities there was a train moving at any point of the day. New York's subway system, one of the most famous in the world, sought to serve each of the city's boroughs aiding in the daily commute of workers, businessmen, and families. Artists again used the imagery of subways to communicate both physical and socioeconomic movement.<sup>83</sup>

Duke Ellington's hit song "Take the 'A' Train" (1941) became a staple for the ensemble and often opened the band's repertoire. Billy Strayhorn, a novice musician from Pittsburgh, wrote "Take the 'A' Train" after he met Ellington and was invited back to his home in Harlem. Ellington wrote down directions for Strayhorn with the first step being "take the A train." To Strayhorn, this meeting was the way to become a big name in the music business. Ellington lived in the Sugar Hill district of Harlem, a section reserved for the wealthy and characterized by mansions and luxurious townhomes. The

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<sup>82</sup> Stilgoe, 1-4.

<sup>83</sup> Stilgoe, 25-26.

lyric, “You must take the A train, To go to Sugar Hill way up in Harlem” embodies the need to get on the train to meet personal goals of fame and fortune. For Strayhorn, the ‘A’ train represented the vehicle to success and his song became the anthem for urban life.<sup>84</sup>

By the 1940s, other people did not view the urban commuter trains with the same hope for a better life as Strayhorn did. To some, the train represented mobile stagnation that carried them between home and work with no hope of any upward mobility to achieve wealth or respect. Ann Petry’s novel, *The Street* (1946) articulates these feelings through the story of a young African American single mother named Lutie Johnson. Petry grew up in Connecticut during the early twentieth century experiencing first hand the racial bigotry of the Jim Crow culture. Her family achieved middle-class status after years of hard work and overcoming local prejudices. Lutie’s story in *The Street* represents the hardships African American women encountered and offers a glimpse into the nature of life for African Americans in the early twentieth century.<sup>85</sup>

Petry’s representation of the train guides the narrative and shapes her account of Lutie’s commute from work to home and around town. Petry returned to the image of the train to illuminate Lutie’s inner psyche and to communicate Lutie’s place on the economic scale. Lutie goes to and from work responsibly by the commuter train hoping that her earnings will bring a better life for her son. This effort comes at an emotional

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<sup>84</sup> Duke Ellington, “Take the ‘A’ Train,” by Billy Strayhorn, recorded 1941, Victor 27380, 33 rpm; Brooke Gladstone, “How Ellington Took the ‘A’ Train,” *All Things Considered*, NPR, accessed February 20, 2015, <http://www.npr.org/templates/story/story.php?storyId=100731586>.

<sup>85</sup> Claudia May, “Railroad Blues: Crossing the Tracks of Gender, Class, and Race Inequities in the Blues and Ann Petry’s *The Street*,” *Trains, Literature, and Culture*, ed. Steven D. Spalding and Benjamin Fraser (New York: Lexington Books, 2011), 3-8.

cost as other commuters on the train constantly objectify Lutie staring at her in a sexual nature. The relentless travel between work and home leads ultimately nowhere and she finds herself in need of money to retrieve her son from an orphanage. Lutie commits murder after the man who had promised to help her reneges on their deal. She decides to abandon her son and run away to Chicago where it will be more difficult to find her amongst the large African American population there. Moving west in American ideology meant new hopes and a chance to start again, but as Lutie holds her one-way train ticket, she realizes that it is not a true escape from her situation, “‘Yes, a one-way ticket,’ she thought. ‘I’ve had one since the day I was born.’”<sup>86</sup> The opportunities for her in Chicago are similar to those in New York continuing an endless “cycle of futility,” without the hope of any upward mobility or the chance to achieve the American dream.<sup>87</sup>

Petry’s symbol of the “one-way” ticket to Chicago unknowingly paralleled the end of the glory years of train travel. The multitude of cultural products that made trains the embodiment of romantic travel and a vehicle of literal and figurative escape could not compete with the increasingly faster and cheaper modes of travel. The nostalgic songs, films, artwork, and literature remain to give modern audiences a glorified version of train travel in America. A perspective free of social stratification, gender and racial bias, and economic struggles inspired the steam locomotive restoration movement of the 1960s and 1970s.

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<sup>86</sup> Ann Petry, *The Street* (Boston: Beacon Press, 1946), 434.

<sup>87</sup> May, 18-25.

## CHAPTER TWO

### INDUSTRIAL MACHINE TO INDUSTRIAL ODDITY: THE EMERGENCE OF MAINLINE STEAM EXCURSIONS

In the late twentieth century, steam locomotives transitioned from being the universally accepted workhorse of the industrial world to a visual spectacle that attracted thousands to ride behind special trains powered by a relic of the past. By exploiting the nostalgia associated with the golden age of train travel, railroad companies intended to create an image of blissful memories of the railroad industry. One of the most famous and longest running programs was the Southern Railway Steam Program that began in 1966 and ended in 1994. The program started with a partnership between the management of the Southern Railway and the members of the fledgling Tennessee Valley Railroad Museum located in Chattanooga, Tennessee to use one of their steam locomotives, No. 4501. That initial agreement led to the restoration and operation of eighteen different steam locomotives over a twenty-eight year period. These mechanical relics powered excursion trains across the southeastern United States on the Southern and later Norfolk Southern's mainline network establishing an unprecedented era of railroad preservation in American history.

Positive railroad images infused American culture until the mid-twentieth century. The final burst of popularity for classic train travel came during the Second World War. Steam locomotives and railroad operations were well established and could get more materials, and passengers, to their destination with less manpower and assured sense of

efficiency. Companies worked with the government rather than against them relieving the need to nationalize the rail networks. In addition to the military's use, the rationing of materials like oil and rubber caused many automobile owners to forego the roads and use the trains for their daily commutes to and from work. The railroads in the 1940s, according to railroad historian Christian Wolmar, "became, once again, the lifeline of the entire national economy."<sup>1</sup> Freight traffic nearly doubled to 737 billion ton miles between 1940-1944. The staggering amount of traffic caused the once threatened industry to thrive to pre-war levels. Nearly every railroad managed to turn a profit during the military conflict, including the Erie Railroad that had not paid a dividend to its investors since 1870. As the war came to a close, the railroads invested in their companies and new equipment to maintain this surge in traffic.<sup>2</sup>

By the 1950s, however, Americans overwhelmingly favored either more individual modes of cross-country travel (the automobile) or the fastest possible mode (airplanes). As a result, passenger trains lost their allure. Speed, luxury, and personal freedom of mobility complemented one another to seal the fate for the American passenger train.<sup>3</sup>

Railroad executives sought to combat this image as an outdated mode of travel by investing in new, innovative equipment that stood out from their competitors. First to go was the motive power for the industry-steam locomotives- that grew increasingly more obsolete with each passing year. After valiantly serving the country during the Second

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<sup>1</sup> Christian Wolmar, *The Great Railroad Revolution* (New York: Public Affairs, 2012), 321-323.

<sup>2</sup> Ibid, 322-323.

<sup>3</sup> H. Roger Grant, *Railroads and the American People* (Bloomington, IN: University of Indiana Press, 2012), 89.

World War, steam locomotives were amassed in “dead lines” eventually succumbing to the torch and sold for scrap value. People lamented the loss of the familiar sights and sounds of a steam locomotive.<sup>4</sup>

Diesels became the new preferred source of power. The early experiments with diesel technology in the 1930s proved that the new technology was more than capable of working the nation’s rail network. The vast amount of advantages and cost savings of diesel technology was enough to convince the majority of railroads to dieselize their systems. Maintenance costs of diesels were half the amount of those needed to maintain steam locomotives with less time in the shop. Multiple diesel locomotives could be lashed together and require only one crew to operate. The duration of diesel fuel far surpassed the constant need to refill the steam engines with coal and water. Steam locomotives were demoted to secondary passenger and freight trains. Within the fifteen years after World War II, steam locomotives slipped to pulling just one percent of the nation’s trains.<sup>5</sup>

Railroads also focused their improvements to their prestige passenger service reserved for luxury, named trains. The streamliner movement continued to influence the direction of passenger car design and construction. The earlier steel heavyweight coaches, similar to the steam locomotives, shifted from the premiere trains to the secondary and commuter trains. The Pullman and Budd Companies built thousands of

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<sup>4</sup> Ron Ziel, *The Twilight of Steam Locomotives: The Complete Story of the Last Steam Locomotives in North America* (New York: Grosset & Dunlap, 1963), 6-10.

<sup>5</sup> Wolmar, 324-325.

new aluminum passenger cars to continue the trend of modern streamliners promoting modernity and propelling the trains into the future.<sup>6</sup>

General Motors' Electro-Motive Division, one of the leading manufacturers of diesel-electric locomotives, collaborated with the Pullman-Standard Company to create an entirely new train in 1947 to tour the country as a mobile advertisement for both the public and railroad executives. It was named "The Train of Tomorrow" and featured the latest innovations for passenger travel. The locomotive at the head of the train was GM's latest edition in its passenger fleet, the E-7 type that featured a flatter nose than earlier models. They ordered four cars from Pullman but supplied many of the designs themselves. GM incorporated many of the products they produced for the railroad industry including electrical units, heating and cooling systems, and various other appliances to serve as a mobile advertisement for the products that could be purchased to make the ride as enjoyable as possible, enticing more ridership.<sup>7</sup> General Motors' President Charles Wilson believed the train would create, "a greater interest in rail transportation by the public and a greater acceptance of the products we furnish the railroads."<sup>8</sup>

GM redesigned the standard passenger car with a new feature that stood out from anything previously seen. Each of the four cars in the consist featured a domed seating

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<sup>6</sup> John F. Stover, *American Railroads* (Chicago: University of Chicago Press, 1961), 234-6; Wolmar, 310-13.

<sup>7</sup> A.C. Monahan, "New Pleasure in Rail Travel," *The Science News-Letter* Vol. 52, No. 6 August 9, 1947, 91.

<sup>8</sup> Albert Churella, "Corporate Culture and Marketing in the American Railway Locomotive Industry: American Locomotive and Electro-Motive Despond to Dieselization," *The Business History Review* 69, no. 2, (Summer 1995), 225.

area that extended above the roofline of the rest of the car giving passengers panoramic views of the passing scenery. GM christened the new kind of car “Astra Domes.”<sup>9</sup> The coach, dining car, sleeper, and lounge-observation car all featured a domed area with twenty-four seats. Upon seeing the public response to the dome cars, railroads, especially those out west with no height limit concerns, invested in the new design to capitalize on the allure of the natural scenery. The institution of the dome car on American trains emphasized the industry’s willingness to adapt to the competitive times, marketing the values of the journey rather than speed. While railroad executives were more than willing to invest and change their aging persona, rail enthusiasts preferred things the way they were.<sup>10</sup>

While technology and appearance changed, Americans became more interested in the operation and history of American railroads. By the 1940s, *Railroad Magazine* featured several sections devoted to the emerging network of “railroad hobbyists.” Individuals, mostly male, supplied letters about the origins of their interest in trains, often the result of a family member working for the railroad or living within close proximity to the railroad tracks. Social clubs and historical organizations of railroad enthusiasts formed to share information with one another and enjoy activities revolving around the railroad. The earliest such club in America was the Railway & Locomotive Historical Society (R&LHS), which was originally founded in 1921 as a club for railroad photographers. Under the guidance of Charles Fisher, the R&LHS evolved into a

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<sup>9</sup> Monahan, 91.

<sup>10</sup> Ibid.

scholarly institution, “that sought to attract serious students of railroad history.”<sup>11</sup> They established a repository to house photographs and artifacts related to the railroad trade at Baker Library on the campus of Harvard University. They also created a journal full of articles related to the history of American railroading. The organization gained the respect of thousands of members but failed to attract a broader audience due to the lack of organized social outings, prompting rail enthusiasts to join other developing clubs.<sup>12</sup>

The National Railway Historical Society (NRHS) filled that void by offering yearly conventions and organizing local train trips. The NRHS began in 1935 after the Lancaster Railway & Locomotive Historical Society in Lancaster, Pennsylvania consolidated with the Interstate Trolley Club of Trenton, New Jersey to form a large interest group devoted to the history of mainline and inter-urban rail history.<sup>13</sup> The small non-profit quickly blossomed into a major organization with chapters of the national organization sprouting up around the nation. By 1960, forty-one chapters served the rail enthusiasts and hobbyists of their community becoming known by the railroads as “railfans.” These groups were responsible for some of the earliest railroad preservation efforts and sought to work with the railroads to ensure that history was not forgotten. Representatives reached out to various railroads for tours of the railroad facilities or organize special train rides over abandoned lines or for the train to be made up of older

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<sup>11</sup> Grant, 257; “History,” Railway & Locomotive Historical Society website, accessed May 20, 2015, <http://rlhs.org/General/history.shtml>.

<sup>12</sup> Grant, 256-257.

<sup>13</sup> Ibid, 257-258.

equipment. These rides that focused on the past were frequently referred to as “excursions.”<sup>14</sup>

Excursions and special trains were not a new phenomenon but started during the primitive years of the rail industry. The specials differed from the named trains that featured the word “Special” within its name. If it was referred to as “The Special” that meant it was a luxury train, whereas special with a lowercase “s” meant it was a specialty train. Nearly every carrier worked with groups and interested parties wanting to schedule their own personal train trips to various destinations. In the 1830s and 40s when the majority of the public had never seen a train before, companies offered short rides for people to experience the trip behind a steam locomotive. These early excursion became known as “demonstration rides.” As the railroads matured, companies offered special trains that revolved around holidays, especially Fourth of July activities, or civic celebrations such as anniversary parties and regional fairs. Railroad-sponsored specials were typically at a reduced round-trip rate allowing people that could not afford the usual fares a chance to ride the train. That kind of train used in the special, however, reflected the discounted ticket. Railroads reserved the newer, more luxurious equipment for the scheduled trains relying on older, secondary equipment for the specials.<sup>15</sup>

Excursion trains took people to a specific place for a specific event, typically music concerts, public picnics, political rallies, and military reunions among others. Those taking spectators to sporting events proved to be the most publicly profiled. Professional, college, and amateur teams utilized the train to get to and from away games

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<sup>14</sup> “About Us,” National Railway Historical Society website, accessed May 20, 2015, <http://www.nrhs.com/about>; Grant, 258-260.

<sup>15</sup> Grant, 42-44.

and journey to any post-season matches. The passengers aboard the team specials typically enjoyed nicer equipment since those trips received more publicity. In the case of cross-country trips, railroads also worked with one another to get the train to its ultimate destination.<sup>16</sup> In 1925, The Missouri Pacific Railroad assisted the University of Alabama football team in reaching their connection to California for the Rose Bowl after their train arrived late from Birmingham. The Missouri Pacific's assistance got the attention of the media who relayed the information to loyal fans awaiting word of the team's arrival.<sup>17</sup>

Those who were not on board the steam specials had the opportunity to watch the train go by en route to the game and then had the ability to meet the team at the depot upon their return. Newspapers reported the itinerary for the special trains granting fans the chance to see the train or plan their day to see it. When the victorious Alabama football team returned from California to Tuscaloosa at 5a.m., thousands of fans were there at the Southern Railway depot to greet and congratulate them on their victory.<sup>18</sup> As the railroads phased out their steam locomotives in the mid-twentieth century, the allure of the special trips shifted from the destination to the motive power that pulled the train.

Throughout the 1950s and early 1960s, when the American rail industry was transitioning from steam to diesel motive power, several railroads offered "farewell to steam" excursion trips that promoted the use of a steam locomotive in their final days. The Norfolk & Western Railway, renowned for their steam locomotive technology,

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<sup>16</sup> Grant, 44-45.

<sup>17</sup> Ibid, 51-2; "Alabamans Make Connection; Railway Helps Out," 1924, Vertical File: 1924-5, Paul W. Bryant Museum, Tuscaloosa, AL.

<sup>18</sup> "Alabama Party To Go Direct To Tuscaloosa," 1926, Vertical File: 1926, Paul W. Bryant Museum, Tuscaloosa, AL.

resisted the transition to diesel for many years due to the fact that most of their revenue came from coal mines in the Blue Ridge mountain region. While other railroads broadcasted the switch to efficient diesels, the companies that worked closely with the coal industry made the change in a very subtle manner. Stuart Saunders, the new president, made the decision to phase out steam for more efficient locomotives.<sup>19</sup> For the fans, the N&W offered many trips behind various types of both passenger and freight steam engines. The railway converted a few gondola cars, used for freight purposes, to serve as open-air passenger cars with benches and safety railing. The gondolas were for the passengers who wanted to stand out in the elements for a better sensory experience of the working steam locomotive. The lack of walls provided a superlative view of the engine at the head of the train and allowed the sounds of the working cylinders and pistons to radiate to the back of the train. Once the farewell trips were over, diesel fuel replaced coal as the N&W's form of energy. Some railroad workers walked off the job that day after steam left the hills of Virginia.<sup>20</sup>

Other railroads kept a few steam locomotives on hand as back-ups in case of need or as steam generators for the corporate facilities in case of power outages. In addition, several railroads saved a few steam locomotives explicitly for steam-powered excursions. The Reading Railroad offered the "Iron Horse Rambles" behind one of four large passenger engines reserved for excursion duties. The Chicago, Burlington, & Quincy,

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<sup>19</sup> Robert C. Post, "The Last Steam Railroad in America: Shaffer's Crossing, Roanoke, Virginia, 1958," *Technology & Culture* 44, no. 3 (July 2003): 564-565, accessed May 20, 2015, <http://www.jstor.org/stable/25148161>.

<sup>20</sup> Wrinn, *Steam's Camelot* (Lynchburg, VA: TLC Publishing, 2000), 1-2.

famous for the *Zephyr* streamliner, also saved two locomotives for similar trips.<sup>21</sup> The Union Pacific Railroad kept one of its passenger steam engines for public excursions and use for executive trains. The destination of the excursion train was no longer the primary reason for people purchasing tickets. It was the experience of riding behind a steam locomotive that caused hundreds of people to indulge in the superfluous round-trip journey that served no other purpose than pure enjoyment. The engines themselves became famous for the simple reason that they were still active. Previously, they were just one of dozens or even hundreds in their same class, but their expulsion from the scrap yard made them famous among the railfan world.<sup>22</sup> The excursions, while successful in gaining public attention, never brought in significant amounts of income and new management did not see the merit in operating old steam locomotives. By 1964, all of these early programs, with the exception of Union Pacific's, were over.<sup>23</sup> The future of operational steam locomotives seemed to rest in the hands of the members of railroad historical organizations.

Railroad companies amassed their fleet of steam locomotives on spurs of track often referred to as "dead lines" waiting to be cut up by a torch and sold off for scrap. Company executives were not concerned with saving this chapter of the industry's history. They were more interested with keeping the railroad as a modern form of transportation rather than one stuck in the past and the existence of the steam engine on

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<sup>21</sup> Ron Ziel, *The Twilight of Steam Locomotives*, (New York: Grosset & Dunlap, 196), 180.

<sup>22</sup> Ibid.

<sup>23</sup> Wrinn, 3; Union Pacific's No. 844 is the only American steam locomotive to have never been retired by a railroad. It is still a part of the UP heritage fleet and makes frequent trips pulling excursion and executive trains.

their trains stymied that image. The destruction of historic equipment prompted the members of various chapters of the National Railway Historical Society and similar organizations to reach out to the railroads requesting older, disused equipment to be donated to their groups for preservation purposes. Donations depended on the willingness of the company's management and the rapport the organization had with the railroad. Once items were received, members pooled money together to rent space to keep the equipment. These early efforts led to some of the first industrial-focused museums in the country.<sup>24</sup> One museum's efforts in particular spurred steam engines to return to the southern mainline tracks.

Several members of the NRHS chapter in Chattanooga, Tennessee as well as other interested parties became involved in starting a collection of historic railroad equipment from the region. In 1961 they founded the Tennessee Valley Railroad Museum (TVRM) to save "American history by preserving, restoring, and operating authentic railway equipment from the 'Golden Age of Railroading.'"<sup>25</sup> They reached out to more than a dozen railroad companies hoping to assemble a small passenger train with a steam locomotive to eventually operate on a few miles of track in the Chattanooga area.

Companies were not interested in dealing with railfan clubs or the amount of work, expenses, and time needed to transport the outdated equipment. The TVRM received numerous rejection letters from railroad executives, managers, and secretaries saying they had no surplus equipment to offer, citing the need for surplus cars. Once

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<sup>24</sup> Several museums cite their beginnings to the local chapters of the NRHS. Some examples include the Heart of Dixie Railroad Museum in Calera, Alabama, the Southeastern Railway Museum in Duluth, Georgia, and the Tennessee Valley Railroad Museum in Chattanooga, Tennessee.

<sup>25</sup> "About Us," TVRM, accessed March 10, 2015, <http://tvrail.com/pages/chattanooga-museum-tennessee-railway-museum>.

older passenger equipment was deemed not acceptable for passenger travel, it was used in railroad duties as mobile offices or quarters for wrecking and maintenance crews.

Companies also had little faith in the mechanical abilities of historical organizations.

W.A. Johnston, President of the Illinois Central Railroad, personal responded to Paul Merriman's inquiry, "When the mechanical condition of a car renders it no longer suitable for our use it would of course not be suitable for the purpose intended by your Society."<sup>26</sup> Other executives sent well wishes to the TVRM on their endeavor but were unwilling to donate equipment. If the museum wanted to succeed, they would have to look elsewhere to start its collection.

Paul Merriman, President of the Tennessee Valley NRHS chapter and subsequent president of the TVRM, frequently travelled with friend and fellow chapter member Robert Soule in the late 1950s and early 1960s to photograph and enjoy the last bit of operating steam in the southeast. Merriman was a chemical engineer for DuPont in Chattanooga while Soule was a field representative for the General Railway Signal Company. Both had a passion for steam locomotives. As steam disappeared from the mainline railroads, Merriman and Soule ventured to short line companies that still regularly used steam locomotives. One such line was the 10.5-mile Kentucky & Tennessee Railroad (K&T) in Stearns, Kentucky located 140 miles north of Chattanooga. The railroad used three 2-8-2 Mikado type steam engines, numbered 10, 11, and 12 to

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<sup>26</sup> W.A. Johnston to Paul Merriman, August 13, 1962, History Vertical File: Letters, Tennessee Valley Railroad Museum Archives, Chattanooga, TN.

haul coal up and down a sharp grade. No. 12 was the biggest of the three and looked worn out from decades of freight duties.<sup>27</sup>

Baldwin Locomotive Works built the engine in 1911 for the Southern Railway, intended for light freight moves. The original number was 4501 and it was the first ‘Mikado’ type engine the Southern purchased. No. 4501 hauled freight throughout the Southern’s system before being sold to the K&T in 1948. Merriman and Soule were enamored of No. 12, one of the few remaining Southern steam locomotives still in existence. They spent some of their vacation time volunteering with the railroad firing the engine up and down the K&T’s route. In 1963 the K&T decided to cease use of steam locomotives and invest in three brand new diesel engines. Merriman and Soule scrambled to gather the funds necessary to purchase No. 12 to power their recreated passenger train in Chattanooga. The K&T was receptive to the idea of the locomotive’s sale and the following year Merriman wrote a personal check for \$5,000 to the K&T for the deed to No. 12 and purchased an additional \$2,000 in spare parts.<sup>28</sup> Merriman then faced the issue of how to get his steam locomotive back to Chattanooga. Merriman wanted to steam it back over the Southern Railway’s subsidiary line, the Cincinnati, New Orleans and Texas Pacific Railway that provided a direct link from Stearns, Kentucky to Chattanooga. He approached the Southern’s management to approve the special move as

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<sup>27</sup> David P. Morgan, *Locomotive 4501* (Milwaukee, WI: Kalmbach Publishing, 1972), 26, 31-33.

<sup>28</sup> Morgan, *Locomotive 4501*, 34-37; Wrinn 4-6.

a one time event. Steam had not operated on the Southern in eleven years and the company's management wanted to keep it that way.<sup>29</sup>

The Southern Railway was one of the first Class I railroads in the country to fully dieselize. The company had not purchased a new steam locomotive since 1928 and the remainder of the fleet was in poor condition after the extreme trials of the mobilizing the war effort. Southern executives were committed to investing in the new technology thereby eliminating all steam locomotives from their railroad at the earliest possible convenience. By 1948, almost half of the company's fleet of locomotive were diesels and the use of steam continued to dwindle. The Southern painted their passenger engines in a green livery with gold lettering and details giving the company the notoriety of having some of the most unique and most beautiful steam locomotives in existence. That public image no longer mattered to Southern executives as the green heavyweight Pullmans of the famed Crescent Limited were replaced with stainless steel streamlined cars pulled by an equally striking streamlined diesel unit.<sup>30</sup>

The Southern celebrated the end of steam with a special ceremony to mark the occasion. On June 17, 1953 heavy Mikado No. 6330 pulled the last steam-powered train over the Southern's system from Oakdale, Tennessee, to Chattanooga. It pulled into Chattanooga where it posed for pictures standing next to a replica of the 1830 *Best Friend of Charleston*, the first steam locomotive to operate on the predecessor company's tracks. A modern F-unit diesel, that became the new workhorse for the Southern Railway,

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<sup>29</sup> Wrinn 4-6; "Cheering Buffs Greet Steamer," *The Chattanooga Times*, June 7, 1964, History Vertical Files: Newspaper, Tennessee Valley Railroad Museum, Chattanooga, TN.

<sup>30</sup> Burke Davis, *The Southern Railway: Road of the Innovators* (Chapel Hill, NC: University of North Carolina Press, 1985), 87-88.

sat on the other track. Southern's then president Harry De Butts remarked on the occasion, "It has taken us 123 years to put out that fire."<sup>31</sup> As far as he was concerned, steam was dead on his railroad.

The Southern sold some of their steam locomotives to smaller companies, the 4501 included, and donated smaller equipment to local communities for display in public parks. One of their most famous passenger engines, No. 1401, eventually found its way to the new Museum of Science and Industry at the Smithsonian Institute in 1961.<sup>32</sup> No. 6330, however, did not have the same fate. As the last representative of Southern steam, the company publicly announced that only the bell and whistle were to be saved and, as a symbolic gesture of the company's commitment to modern railroading, the rest of the engine was cut up for scrap in 1953. The corporately published *Ties* magazine documented the whole event through stories and pictures. Like Faulkner, the author referred to steam locomotives as "knights of the past" that fell to the "inevitable march of progress." The end of 6330's trip marked the end of, "an era, an age, epoch" the likes of which "we will never see again." The article closed with, "But there are greater tomorrows."<sup>33</sup>

Eleven years later in 1964, Paul Merriman reached out to the several managers and executives of Southern including President D.W. Brosnan for permission to operate his steam locomotive over their right-of-way. After initial rejections, Merriman traveled to the Southern's headquarters in Washington D.C. to personally discuss the matter with

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<sup>31</sup> "Run of Last Steam Locomotive," *Ties Magazine*, July 1953, accessed March 12, 2015, <http://southern.railfan.net/ties/1953/53-7/fire.html>.

<sup>32</sup> "The Future Generations May Know," *Ties Magazine*, Jan. 1962, 4-7.

<sup>33</sup> "Run of last steam locomotive."

upper management. He found an ally with the vice president of law, W. Graham Claytor, Jr., who possessed a similar affinity for steam locomotives. Years earlier, Claytor wrote several letters to then Norfolk & Western President Stuart Saunders to preserve the last remaining Class J passenger locomotive, No. 611, from becoming scrap. Claytor's interest in the moving the engine and his skill negotiations convinced Brosnan the move could serve as a good public relations event. Brosnan placed full responsibility for the move with Claytor with the main objective to not interrupt the busy CNO&TP line. When Merriman heard the move had been approved, he went back to Stearns to prep the locomotive for its journey.<sup>34</sup>

Merriman, Soule, and others worked tirelessly to get the engine road worthy for the special trip to Chattanooga. They even redressed it in its original Southern appearance, returning No. 4501 as the engine's identity. Southern provided a sleeper car, a gondola fitted with benches and a roof, and an office car for the traveling executives to accompany the 4501 on its trek to its new home. Southern also sent Walter Dove, a road foreman with steam experience, to engineer the train. On June 6, 1964, No. 4501 pulled the three-car special onto the Southern's mainline. Civic leaders and some of the Southern's biggest freight clients rode the special steam powered train while thousands of people stood trackside to witness the passing steam locomotive; a sight that had not happened in eleven years. Those who were not given the opportunity to ride on the train found other methods to trail the steamer: "Where highways went alongside the tracks, motorists accompanied in parade formation. Many of the motorists had passengers using

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<sup>34</sup> Morgan, *4501*, 37-38; Wrinn, 6-8.

cameras to record the event.”<sup>35</sup> Fire departments greeted the engine along the way with hoses full of water to replenish the tender’s tank. With the exception of one minor mechanical mishap, No. 4501 performed well enough to make it to Chattanooga without any diesel assistance.

The public attention and the lack of delays for other trains convinced Brosnan to allow other similar trips on his railroad. Three months later the Atlanta chapter of the NRHS chartered an excursion using their own steam locomotive. Southern’s sudden embracement of steam locomotives shocked many people who experienced the earlier management’s attitude toward the antiquated technology.<sup>36</sup>

Merriman worked with Soule to organize the mechanical overhaul No. 4501 so desperately needed. As a thank you for the hard work and moral support of moving 4501 to Chattanooga, Merriman allowed members of the TVRM to help operate 4501 back and forth over a quarter of a mile of track, while friends and family rode in the cars behind the engine. According to journalist Bill Anderson, the whistle blew “incessantly” and he estimated that the train traveled upwards of twenty-five miles after everyone had a turn in the cab. Merriman also used the opportunity to start identifying mechanical issues that needed to be addressed.<sup>37</sup>

Fifty years of pulling freight and dragging coal up and down a 3.5% grade left No. 4501 in very rough condition. The all-volunteer crew spent days, nights, and

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<sup>35</sup> Wrinn, 7-8.; “Cheering Buffs Greet Steamer,” History Vertical File: Newspapers, Archives Collection, Tennessee Valley Railroad Museum, Chattanooga, TN.

<sup>36</sup> Wrinn, 8-10.

<sup>37</sup> Bill Anderson, “TVRM ‘Choo Choo’ Gets Local Baptism,” *Chattanooga New-Free Press*, History Vertical File: Newspapers, Archives Collection, Tennessee Valley Railroad Museum, Chattanooga, TN.

weekends working on the engine fixing problems as they arose. New electric wiring was installed, dents straightened, the leaky tender fixed, and all mechanical appliances were serviced. Merriman and his crew utilized the opportunity to modernize the locomotive to make it more suitable for excursion operations. Railroad technology had advanced substantially since No. 4501 was built in 1911. The crew installed radio equipment in the cab for efficient communications for the crew and added an extra “intake line” to the rear of the tender for an extra water car to augment the water supply for less stops on the trips. Members of the mechanical group developed their own skill sets for maintaining the locomotive. Through trial and error, the TVRM slowly gained boilermakers, electricians, machinists, pipefitters, and countless other laborers that became the backbone of the museum’s mechanical department. After nearly two years and an estimated 2,650 volunteer hours, No. 4501 was ready for its first trip in its new career as an excursion engine.<sup>38</sup>

Graham Claytor approached Merriman with Southern Railway’s moral and financial support. Claytor gave \$5,000 to the locomotive’s repairs, covering the cost of new flues for the boiler. Claytor wanted 4501 to pull a special train to Richmond, Virginia for the 1966 National Railway Historical Society Convention, where thousands of railroad enthusiasts could ride behind the newly restored steam locomotive. At Claytor’s request, No. 4501 was not painted black as it would have been when it operated in revenue service but, instead, painted in the company’s famed green and gold livery of the passenger steam locomotives. Claytor ultimately wanted to restore the Ps-4 locomotive sitting in the basement of the Museum of American History in Washington,

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<sup>38</sup> Morgan, *4501*, 43-44; Wrinn, 13-4.

D.C. but a freight engine dressed in green and gold provided a suitable substitute. Claytor arranged five older passenger cars, a baggage car, five coaches, and a sleeper car, to accompany the engine to Richmond.<sup>39</sup> For Claytor, the train was a nostalgic recreation of the golden era of American railroading that was sure to be the focal point of thousands of cameras from people on board the train and standing trackside.

President Brosnan was still leery of a steam locomotive operating over his railroad, but he kept his faith in Claytor and put him in charge of the whole trip. No. 4501 left the Chattanooga Terminal Station en route for Richmond, Virginia at 8:30am on August 18, 1966. The trip marked the first steam locomotive powered public excursion over the Southern Railway system. The train stopped several times on its trek for public display, including a stop in Asheville, North Carolina, for a photo op with President Brosnan. The train arrived at Richmond on June 26<sup>th</sup> to hundreds of receptive fans eager for the chance to ride behind a steam locomotive. Claytor was the featured speaker for the convention. Rather than discuss the restoration efforts of No.4501 or the planning logistics of the trip, he focused his speech on the progressive steps the Southern had performed to make it a viably modern railroad including the new computer system set up in Atlanta and remote-controlled diesel locomotives. The discussion of steam came at the end when he stressed the importance of spreading the word about the merits of shipping on the Southern Railway. In return, Claytor promised the continued operation of steam excursions over the railway's mainline. The 4501's first excursions at the NRHS

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<sup>39</sup> Morgan, *4501*, 44.

convention sealed that promise and subsequently christened the locomotive's second career as an excursion engine.<sup>40</sup>

In 1967 only months after the conclusion of the first season of steam excursions, Graham Claytor was named as the new president of the Southern Railway. Like Brosnan before him, Claytor committed his time to keeping the Southern a progressive and efficient railroad, but he now had the power to expand the steam excursions into a full program. Claytor viewed the locomotives as goodwill ambassadors for the railroad. He envisioned them making appearances at local festivals and civic anniversaries in addition to pulling excursion trains. Claytor summed up this initiative by saying, "It's a good thing to let another generation know what a steam locomotive is."<sup>41</sup> Ideally, Claytor wanted a large passenger engine capable of pulling long trains of adoring railfans. Negotiations for a larger Pacific-class locomotive went nowhere, and Claytor was left without additional motive power.

Claytor learned from his brother, Robert Claytor of the Norfolk & Western Railway, of a short line railroad in North Carolina that had two former Southern steam locomotives. Robert Claytor arranged for one of them to come to Roanoke, Virginia, to pull free train rides for the re-dedication of the Roanoke Transportation Museum in 1967. Within months of Graham Claytor's term as president, he made an unprecedented move in the railroad industry by trading two operational diesel locomotives to the East Tennessee & Western North Carolina Railroad in return for their two steam locomotives. For the first time since the 1950s, a Class I railroad took ownership of a steam

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<sup>40</sup> Morgan, *4501*, 44-47, 51-52.

<sup>41</sup> W. Graham Claytor, Jr. Quoted in Burke Davis, *The Southern Railway: Road of the Innovators* (Chapel Hill, NC: University of North Carolina Press, 1985), 265.

locomotive.<sup>42</sup> This unprecedented action epitomized Claytor's commitment to make the steam program a success. Now that the railroad once again owned steam locomotives, they needed a designated site for storage and maintenance.

The Southern's earlier commitment to eliminating steam from their system not only changed the way the trains moved but the railroad's very landscape as well. The company started removing coal and water towers as the various divisions discontinued their steam locomotives. The cluster of roundhouses and machine shops were adapted to service the new technology rather than the old. Beginning in the late 1940s the Southern determined that entire new yards and service buildings needed to be constructed. The company built new "push-button" freight classification yards incorporating the latest in automated rail technology. These yards were typically built outside of large cities away from earlier facilities to allow for more room in the case of future growth. The Norris Yard outside of Birmingham, Alabama, was named after former president Ernest Norris and opened for use in 1952. The yard also featured a brand new diesel service facility for both periodic maintenance and inspection work.<sup>43</sup>

The Norris shops reflected the evolution of railroading operations. Companies maintained and serviced steam locomotives in massive brick buildings surrounded by smaller structures that housed the various machine shops needed to repair different pieces of the engine. The campus of industrial buildings created an intimidating spectacle with pillars of smoke rising into the sky from the multiple chimneys and steam locomotives

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<sup>42</sup> W. Graham Claytor, Jr., Foreword. *Weekend Steam: 25 Years of (Norfolk) Southern Steam Excursions*, ed. Bill Schaefer (Atlanta, GA: Southern Railway Historical Association Press, 1992), vi-vii; Wrinn, 22-23.

<sup>43</sup> "Ernest Norris Yard," *Ties Magazine*, October 1952, accessed March 12, 2015. <http://southern.railfan.net/ties/1953/52-10/fire.html>.

moving about the property. The constant sound of pounding hammers and machinery working generated a cacophony of noise that only alleviated when there was a crew change between shifts. The Norris shop, however, was a modest six-stall modern structure covered with corrugated sheet metal sidings. The roofline shot up over the last three stalls with massive windows on all sides of the upper floor to allow natural light into the structure. The building stood alone with standard replacement parts making the service buildings unnecessary. Southern intended the Norris shops to share the load of service work with similar facilities in Chattanooga and Atlanta, but those two proved to be more utilized leaving open space for storing Southern's steam locomotives at the Norris Shop.<sup>44</sup>

As a result of its underutilization, Claytor selected Norris as the base of steam operations. The building featured a drop pit for inspections and an overhead crane system for heavy repairs or complete overhauls. Norris' geographic location placed it in the center of the Southern's system making it easier for the crew to move the trains to their excursion sites, known as "ferry runs." He sent the two steam engines, No. 630 and No. 722 acquired from North Carolina, to Norris for a full inspection from the recently hired Master Mechanic of Steam, Bill Purdie. Purdie's experience with the railroad dated back to 1933 when he was hired on as a machinist's assistant with the Southern. He advanced to become a foreman in the Pegram Shops in Atlanta, Georgia working through the transitional years from steam to diesel. Purdie helped found the Atlanta chapter of the

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<sup>44</sup> "Diesels Spark Shop Revolution," *Ties Magazine*, July 1953, accessed March 12, 2015, <http://southern.railfan.net/ties/1953/53-7/fire.html>; Wrinn, 24.

NRHS, where he oversaw the operation of their own steam locomotive Savannah & Atlanta No. 750.<sup>45</sup>

Claytor made his assistant and fellow lawyer, Jim Bistline, excursion coordinator. Southern leased No. 4501 from Merriman, maintaining the locomotive at Norris during the off-season. No. 4501 was the star of the program with Nos. 750, 722, and 630 filling in where needed. The steam program worked with museums and NRHS chapters to sponsor the trips. The railroad supplied the engine and its crew, while the organization was responsible for selling the tickets. Southern was reimbursed for the expenses and the sponsoring organization kept the remainder of the revenue. Members of the sponsoring group worked the trains as volunteers and they could supplement their own passenger equipment depending on demand of the trip. The steam department performed dozens of excursions each year accumulating a growing fan base of railfans young and old.<sup>46</sup>

Claytor believed the steam locomotive powered excursions provided good will ambassadorship to the communities served by the Southern. The trips offered positive headlines for the local papers rather than stories about grade crossing accidents, derailments and the overall depressed state of the railroad industry.<sup>47</sup> The steam program began thriving during a turbulent time for American railroads. The previously dominant New York Central and Pennsylvania Railroads set the standard for operations and luxury trains in the country. The industrial rich northeast provided a multitude of factories, distributors, and mills to service within close proximity to one another. However, the

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<sup>45</sup> David P. Morgan, "Master Mechanic-Steam Engines," *Trains Magazine*, September 1976, 27-8.

<sup>46</sup> "Southern Steam: Saga of Success," *Ties Magazine*, Jan.-Feb. 1972, 10; Wrinn, 20-21; 23-26.

<sup>47</sup> Davis, 264-265; Wrinn, 23.

growth of the trucking industry caused many of these clients to ship their products by road, eliminating their contracts with the railroads. In the early 1960s, both railroads made drastic cuts with no regard to preserving their storied history. In one of the most symbolic gestures possible, the Pennsylvania Railroad optioned the air rights above the iconic Pennsylvania Station on Manhattan Island. The grandiose neoclassical behemoth embodied the might and power of the rail industry, but its operating cost became too much for the ailing Pennsylvania. Demolition started on October 1963, foreshadowing another implosion on the horizon for the northeastern railroads.<sup>48</sup>

Both the NYC and Pennsylvania realized merging with another railroad was the only way to save their companies from bankruptcy. Alfred Perlman, President of the New York Central, wanted to merge with both the Chesapeake & Ohio and Baltimore & Ohio Railroads, creating a massive system with industries still utilizing rail services. The C&O decided to merge with the B&O but left the Central out of the deal. Perlman met with James Symes of the Pennsylvania to begin merger negotiations, which led to backdoor politics and misuse of finances. The Pennsylvania hired Stuart Saunders, president of the Norfolk & Western, to succeed Symes as president and lead the company through the merger. The Pennsylvania and NYC finally merged on February 1, 1968 to form the largest railroad in the world, Penn Central.

Stuart Saunders was elected Penn Central's first president with Perlman serving as an executive aide. His efforts to diversify the company with varying kinds of subsidiary businesses led to further loss in revenue. To reassure the shareholders,

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<sup>48</sup> Rush Loving, Jr. *The Men Who Loved Trains: The Story of Men Who Battled Greed to Save an Ailing Industry* (Bloomington, IN: University of Indiana Press, 2006.), 28-32, 71.

Saunders inflated profit numbers making the company seem successful when it was actually losing upwards of one million dollars per day. Penn Central filed chapter eleven on June 21, 1970. Within fourteen months, three other railroad companies in the northeast filed for bankruptcy. In addition, the state of the country's passenger trains was at an all time low. Railroads cancelled passenger trains as fast the Interstate Commerce Commission approved them. Some companies, upon receiving word of the ICC's authorization, cancelled the trains mid-route, kicking out passengers hundreds of miles from their ultimate destination. The federal government finally alleviated the situation by establishing the publicly funded Amtrak Corporation in 1971. Five years later, the government passed similar legislation to consolidate the bankrupt northeastern railroads into one public-private enterprise called Conrail.<sup>49</sup>

Unlike the northeastern railroads, the southern and western companies fared better. The cities were spaced further apart for more profitable long haul trains than the local operations of the northeast. Under careful management and a commitment to modern railroading, the Southern was a profitable, modern company that represented the continued relevance of the rail industry. The Southern even retained their passenger operations until 1979 when they handed off their remaining routes to Amtrak.<sup>50</sup> While one region's railroads were collapsing, another region experienced the resurrection of steam-powered machinery. The Southern promoted their commitment to progressive railroading coupled with an appreciation of their heritage through several 1970s advertisements depicting No. 4501 with the title, "One of the first railways to go

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<sup>49</sup> Loving 41-47, 86-88, 113-115; Wolmar, 350-352.

<sup>50</sup> Loving, 17-18; Davis, 286.

completely diesel still runs this steam locomotive.” Southern used the juxtaposition of the image of the steam locomotive with the text describing the \$160 million in infrastructure improvements to show their clients “how far we’ve come.” The machine that formerly symbolized an industry stuck in the past evolved to represent a prosperous company devoted to serving the people and honoring its heritage.<sup>51</sup>

The mass appeal of operating steam locomotives caused the Southern Excursion Program to expand with more trips carrying more passengers every year resulting in longer trains. By the mid-1970s, the excursions carried upwards of 50,000 people each year with a continued demand for more trips. The group of engines and passenger cars created a rolling exhibit combining different eras and regions of railroading. The original Southern engines were a good representation of the company’s era of steam power, but they were never built for passenger service. When No. 4501 and the first group of locomotives proved unable to handle the heavier and more frequent excursion trains, the company looked elsewhere for vintage steam locomotives with the size and tractive effort needed to power the trips.<sup>52</sup>

The Southern met with various historical groups, private collectors, and scenic railroads to lease their engines for one or multiple excursion seasons, as they were needed. The leased equipment was brought to Birmingham and the company steam department in the Norris shop serviced it. While in excursion, the foreign power received a “makeover” of sorts that disguised the engine as a Southern locomotive. The names of their predecessor railroad were covered over and replaced with “SOUTHERN.” The

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<sup>51</sup> “Southern Gives a Green Light” (advertisement), Vertical file: Advertisements, Archives Collection Norfolk & Western Historical Society, Roanoke, VA.

<sup>52</sup> “Southern generates steam excitement,” *Ties Magazine*, Mar-April, 1978, 6-7.

company's logo was stenciled on to the front pilot and the steam department continued a Southern steam era tradition by placing a bronze eagle above the headlight. Former Texas & Pacific No. 610, one of the three steam locomotives that powered the American Freedom Train in 1976, became Southern No. 610. Canadian Pacific No. 2839, a "Royal" Hudson class passenger engine, became Southern No. 2839. Two of the leased locomotives' numbers, No. 2839 and No. 2719, coincided with two diesel locomotives on the Southern's roster.<sup>53</sup> To prevent confusion in operations, the Southern changed the diesels' numbers rather than altering the steam locomotives placing their goodwill ambassadors on a higher pedestal than their revenue engines.<sup>54</sup>

Some of the passenger equipment used in the steam program received massive overhauls, tailoring them to their newfound purpose as excursion cars. Several Southern heavyweight coaches that dated back to the 1930s and 1940s were completely gutted of their interiors and rehabilitated with sixty wooden benches placed in the middle of the car facing outward toward the windows. The windows were removed and safety bars installed to create a new open-sided coach explicitly for railfans who wanted the full sensory experience of a train with a steam locomotive at the head. Tourist and scenic lines used comparable equipment in their operations and Claytor wanted to implement the same accommodations for die hard fans of his steam program. The car shop workers also added an observation platform to one end of coach No. 1056 similar to one found on an office car or lounge car from the earlier express trains. The car was christened the

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<sup>53</sup> Wrinn, 49-53; Bill Schafer, ed. *Weekend Steam: 25 Years of (Norfolk) Southern Steam Excursions* (Atlanta, GA: Southern Railway Historical Association, 1992): 22-23, 46-47.

<sup>54</sup> Wrinn, 58.

*Lookout Mountain* and placed at the back of many excursion trains, granting the riders incredible views of the working engine as the train ran around a large curve.<sup>55</sup> The resulting train created a hodgepodge of equipment from different eras, from different backgrounds, and with different paint schemes. The Southern excursion trains were not necessarily a recreation of the golden era of railroading as intended but a new type of train that presented a fictional version of the past to impress modern audiences.<sup>56</sup>

Consequently, the layout of the train's passenger cars did not reflect the way they were used in the early twentieth century but changed to fit the needs of the new phase of steam railroading. The baggage car, usually found behind the engine at the front of the train, drifted to the middle for easier passenger access. In the excursion era, the baggage car carried souvenirs and refreshments for the passengers to purchase during the trip rather than their luggage. Additionally, the large sliding doors were left open and railing installed so people could lean out the window for photographing the engine. When the program started using larger engines, they converted older baggage cars to serve as tool cars for the engine crew. The tools cars contained the specialty machines needed to service and repair the engines while away from the shop. The tool cars regained their original spot directly behind the locomotive, but it now served the people in the front of the train rather than the back. The converted baggage cars evolved to be a rolling

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<sup>55</sup> "Lookout Mountain" diagram, Hol-00625.06, Archives Collection, Norfolk & Western Historical Society, Roanoke, VA.

<sup>56</sup> Wrinn, 32-33.

roundhouse capable of repairing the engines and offering a place for the crew to relax without dirtying the passenger area.<sup>57</sup>

The alterations conducted on the excursion locomotives and passenger cars signify the difference between the missions of a corporation and a museum. The Southern Railway was not a museum devoted to the preservation of historic railroad equipment nor was it a non-profit with a mission of restoring older pieces to their period of significance. Southern's intentions were to use the equipment to their advantage, getting the attention of both the railfan and non-railfan communities. They had no corporate obligation to any group or audience to "restore" a steam locomotive to its historic appearance when it served in revenue service. The only explicit goal of the excursion program was to bring attention to the railroad company and promote good public relations with its clients and the local communities. In addition, however, the excursion program gave publicity to its partner museums and historical organizations, further promoting the history of the railroad industry.

The Tennessee Valley Railroad Museum's close partnership with the Southern gave the museum opportunities to advance its own mission of operating a recreated passenger train from the golden era of railroading. While No. 4501 powered excursion trains all over the southeast, TVRM members continued to develop their collection of historic railroad equipment through meetings and negotiations with local railroad companies. The collaborative efforts with the Southern's excursion trains created a long lasting relationship with the railroad company. The TVRM constantly assisted wherever

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<sup>57</sup> "Head End car diagram," July 30 1982, Hol-00132.37, Archives Collection, Norfolk & Western Historical Society, Roanoke, VA.

they could to make the excursion program a success. In return, the Southern looked out for the young railroad museum, donating old equipment when it was deemed unfit for mainline use. The Southern also donated four acres of land adjacent to one of their branch lines outside of downtown Chattanooga.<sup>58</sup> The museum finally had a permanent site to store and service its equipment.

Paul Merriman, 4501's owner, remained as museum president through the mid-1970s, when his friend Robert Soule succeeded him. Under Merriman and Soule's leadership, the organization worked to achieve the final component of its mission, an operational section of track for their own trains. They acquired old track from a closed short line railroad. In the early 1970s, they started the process to reopen the pre-Civil War era tunnel built through the Missionary Ridge by the Southern's predecessor, East Tennessee & Georgia Railroad, in 1858. Southern abandoned the tunnel after an alternative, faster route was found in the early twentieth century. Months of work reopened the historic tunnel in 1973 and the museum then sought to build a new bridge connecting the tunnel to a 1.5-mile segment of track the Southern had donated to the museum. The new bridge cost \$80,000 and took four years to build. By 1979, the TVRM had a three-mile line to operate small trains for the public.<sup>59</sup> The TVRM installed a turntable at one end of the line and a "wye switch" at the other so they would not have to

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<sup>58</sup> Carolyn Mitchell, "Railroad Museum Plans Terminal, Display Building," *Chattanooga Times*, May 9, 1981, History Vertical File: Newspapers, Archives Collection, Tennessee Valley Railroad Museum, Chattanooga, TN.

<sup>59</sup> *Ibid.*

operate the steam locomotive backwards.<sup>60</sup> In addition to creating a regular line for train rides, the museums continued collecting historic rail equipment for restoration and operation. With larger engines now on the Southern's roster, the railroad leased their two smaller locomotives to TVRM in the 1980s. Nos. 630 and 722 pulled the "Missionary Ridge Local" from one end of the museum to the other. TVRM sponsored excursions out of Chattanooga each year and they were usually powered by the local hero, No. 4501.<sup>61</sup>

While the Southern's kept steam travel alive, the rail industry itself continued to struggle. Mergers of major railroads became common. The Southern merged with the Norfolk & Western Railway to form the Norfolk Southern Corporation. Robert Claytor, Graham Claytor's brother, became the first President and CEO of the new company. While in the N&W's law department, Robert coordinated with the Southern when the excursion trains used the N&W's tracks. He also arranged a steam locomotive to pull the last N&W passenger train in 1971. In his tenure, Robert Claytor restored two former N&W locomotives, Nos. 611 and 1218, to pull excursions for the Norfolk Southern Steam program. The larger and more powerful locomotives allowed Norfolk Southern to pull longer trains. Carl Jensen, a former N&W employee, replaced Jim Bistline as the excursion coordinator in 1987.<sup>62</sup>

Jensen believed in the merits the excursion brought to the railroad but he also felt that they were not connecting with their passengers. He started the *On Board Times*

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<sup>60</sup> A wye switch is a triangular track formation that can turn a train around without the need of a turntable.

<sup>61</sup> "5 Excursions Planned," *Chattanooga Free Press*, Sept. 6, 1993, History Vertical File: Newspapers, Archives Collection, Tennessee Valley Railroad Museum, Chattanooga, TN.

<sup>62</sup> "Norfolk Southern Celebrates 25 years of Steam Excursions," *Onboard Times*, Special Anniversary Edition, Norfolk Southern Corp., Norfolk, VA, 1991; Wrinn, 79.

publication for distribution on the excursion trains. Each edition was filled with histories of the steam engines, happenings in the steam department, and articles about the freight operations of Norfolk Southern. Jensen also arranged for the company exhibit car to accompany the excursion trains on their journeys so the passengers could learn about the history of the company and its goals for the future. It was the first time the program ever provided additional information to help place the trains into the larger context of the corporate rail industry. Beginning in the late 1980s, Norfolk Southern overhauled the fleet of passenger cars reserved for the excursion trains and painted them in one scheme reminiscent of the trains on the Norfolk & Western Railway. It was the closest the train ever came to truly recreating a train from the golden age of railroading.<sup>63</sup>

In spite of the investments and years of successful trips, Norfolk Southern elected to end the steam program at the conclusion of the 1994 season. A myriad of factors contributed to the dissolution of the excursion program after twenty-eight years of operations but one changed the entire industry's reception of special trains. On September 22, 1993, Amtrak's *Sunset Limited* plunged off a drawbridge into the Big Bayou Canot outside of Mobile, Alabama killing forty-seven people on board. Though the accident was ruled a fault of a barge that dislodged a section of the bridge, the national publicity of the accident made railroads hesitant toward non-revenue trains on their system. CSX, who owned the railroad bridge where the accident occurred, increased

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<sup>63</sup> Wrinn, 79-80; 95-97. "Shades of the Powhatan Arrow: Passengers won't mind seeing read aboard Norfolk Southern's rebuilt steam excursion train," *Onboard Times*, no. 6, Norfolk Southern Corp., Norfolk, VA, 1992.

their minimal liability insurance from \$10 million to \$200 million.<sup>64</sup> Norfolk Southern also increased their insurance costs leaving many of the museums and historical organizations unable to sponsor any future excursions. In 1994, David Goode, CEO of Norfolk Southern from 1990-2005, released a statement citing the steam excursion as being “incompatible with our total commitment to customer service,” further adding the board of directors’ inability to, “justify the program in terms of the physical, financial, and human resources that it demands.”<sup>65</sup> Thousands of people wrote letters and signed petitions to keep the steam program alive, but the cries from railfans, locals, and museum members fell on deaf ears. The excursion program was over. N&W No. 611 pulled the final steam excursion from Birmingham, Alabama, to Chattanooga, Tennessee, on December 4, 1994. After No. 611 returned to Roanoke, Virginia under its own power three days later, steam was once again gone from the southeastern region.<sup>66</sup>

No. 4501 returned to the TVRM and Norfolk Southern donated No. 630 to the TVRM for use on its train rides. Norfolk Southern’s decision to abolish the program deeply affected the operations of the TVRM. The excursions brought in an estimated 30% of the museum’s annual revenue and the company’s new insurance policy eliminated the special trains that operated from the museum to the downtown Chattanooga Choo Choo Hotel. At the time of program’s end, the TVRM brought an additional \$3 to 4 million dollars to the local economy, in large part to the collaboration

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<sup>64</sup> Jeff Powell, “Bama Catastrophe Could Derail Railroad Excursions,” *Chattanooga Free Press*, History Vertical File: Newspapers, Archives Collection Tennessee Valley Railroad Museum, Chattanooga, TN.

<sup>65</sup> “NS Discontinues Steam Program,” *Paces Magazine*, December 1994, 15.

<sup>66</sup> Wrinn, 88-90.

with the corporate steam excursions.<sup>67</sup> The end of the Norfolk Southern steam program meant the Chattanooga-based museum had to adapt to sustain its business.

To supplement the income, the museum started operating freight trains with local businesses in the mid-1990s. Lines that Norfolk Southern deemed unprofitable were leased to the museum for extra revenue. The TVRM now operates over one hundred miles of tracks serving small firms and major corporations including the Volkswagen plant located outside of Chattanooga. As a result, the TVRM offers excursion trains over this trackage using both historic steam and diesel locomotives pulling its collection of vintage passenger cars. The freight operations make the steam rides a possibility.<sup>68</sup>

The Southern and Norfolk Southern programs provided an estimated 1.5 million people the chance to ride behind an operational steam locomotive over twenty-eight years of operations. The exploitation of the nostalgic feelings of rail travel allowed more than a dozen steam locomotives to operate over mainline tracks in the modern railroading era. The various engines used in the program went to other tourist lines or railroad museums for display or use on their scenic lines. Railfans lamented the loss of the excursion program but remembered their experiences and hoped that one-day steam would return to the mainline.

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<sup>67</sup> Judy Lowe, "Steam Excursions," *Chattanooga Free Press*, November 16, 1994.

<sup>68</sup> Personal communication with Trevor Lanier, historian at the Tennessee Valley Railroad Museum, March 11, 2015.

## CHAPTER THREE

### INTERPRETATION FOR THE 21<sup>ST</sup> CENTURY

When Norfolk Southern ended the steam excursion program in 1994, the public who lived within its system lost their opportunities for yearly encounters with operable, mobile pieces of industrial history. In addition, the museums and historical organizations that regularly sponsored the trips lost a large portion of their annual income. A new generation of railfans never had the opportunity to experience steam on the mainline first hand. In spite of this loss, however, the remnants of the excursion program created new opportunities for keeping steam technology alive. In 1995, the equipment and tools in the Norris Shop went to auction where bidders from other corporations and scenic railroads scavenged the collection to aid their own steam operations. Norfolk Southern returned the leased engines to their respective owners for operation or preservation and donated the remaining locomotives to various railway historical groups. Steam locomotive excursions were over in the South. The Union Pacific Railroad's continued operating their two steam locomotives. A few major railroads also occasionally allowed restored locomotives to pull excursions on their networks.

Interested tourists and railroad fans increasingly turned to industrial and transportation history museums in the wake of the end of the excursion program. Industrial heritage museums attempt to utilize the physical evidence of former industrial activity to connect people to a past way of life as a comparison to their modern world. The physical objects left behind in the form of buildings, mines, mills, machinery, tools, and steam locomotives possess the ability to give a depiction of how the built

environment came into existence and functioned. Transportation museums, in particular, offer a more desirable experience than mill or mining museums because most everyone can relate to using various modes of transportation.<sup>1</sup> The exhibits and interpretation also have the capability to tell a more complete story of the struggles and obstacles industrial workers constantly had to overcome. The success of industrial heritage museums eventually led to recent resurgence of mainline steam excursions through partnerships with industrial heritage museums and modern railroad corporations. Through this modern collaboration, patrons and excursions passengers have gained a better understanding of their past and an appreciation for modern industry.

In 2010, Charles Wilson “Wick” Moorman, Chairman & CEO of Norfolk Southern Corporation, announced that Norfolk Southern intended to start a new steam excursion program similar to the company’s predecessor. The new program, called “21<sup>st</sup> Century Steam,” arose from a visit to the Tennessee Valley Railroad Museum (TVRM) in 2007. Moorman was a guest speaker at the 2007 National Railway Historical Society’s national convention in Chattanooga, Tennessee. While there, he toured the TVRM’s steam facilities and met with museum president Tim Andrews. Andrews told Moorman of the former partnership between the two institutions to operate steam excursions throughout Southern and Norfolk Southern’s territory. Moorman recognized the opportunity to once again utilize the image of the steam locomotive as a means to

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<sup>1</sup> Brian Goodall, “Industrial Heritage and Tourism,” *Built Environment* Vol. 19, No. 2 (1993), 94-6, accessed March 3, 2015. <http://www.jstor.org/stable/23287681>.

connect with the public, demonstrating the railroad industry's vital role to the national economy, job opportunities, and environmental consciousness.<sup>2</sup>

Moorman believed, like Graham and Robert Claytor before him, that the company's heritage could serve as a tool for public relations and goodwill ambassadorship:

Steam locomotives are a direct link to the earliest days of U.S. railroading... they are part of our proud heritage as railroaders. By putting steam trains back on the rails, we can re-connect with our roots while educating the public about the critical role Norfolk Southern plays today as an engine of American commerce.<sup>3</sup>

The use of steam locomotives offers a visible, tangible example of the advancements and vitality of modern railroading.

Unlike the original steam program, Norfolk Southern had no plan to fund or staff a full-time steam department. Instead it relied on operable steam locomotives and crews from partner museums and historical organizations. The new program began as a collaborative partnership between Norfolk Southern and the Tennessee Valley Railroad Museum for the use of its steam locomotives, all of which served in original excursion service, to power special trips for employees, clients, government officials, and business partners, but with only a handful of public excursions. The early success of the program prompted Norfolk Southern to authorize more public trips and partner with the Fort Wayne Railroad Historical Society (FWRHS) located in Fort Wayne, Indiana. The FWRHS owns and operates ex-Nickel Plate Road No. 765, a Berkshire-type steam locomotive, that had previously worked with the Norfolk Southern steam program in the

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<sup>2</sup> "CEO is driving force behind steam," *BizNS*, Vol. 3, No. 5, Sept.-Oct. 2011, 10.

<sup>3</sup> *Ibid.*

1980s and 1990s.<sup>4</sup> The locomotives now have their own crews accompany the engines with a few Norfolk Southern employees dispatched to ride along for assistance. When the announcement was made in 2010, one of the questions Moorman received was about the possibility of another former steam locomotive joining the new program: the Norfolk & Western Class J No. 611.<sup>5</sup>

Upon the dissolution of the steam program, N&W No. 611 returned to its hometown of Roanoke, Virginia, after its final excursions from Chattanooga, Tennessee to Birmingham, Alabama, in December 1994. Bob Claytor, president of the Norfolk & Western and first president of Norfolk Southern, first restored the engine as a gift for the people of Roanoke during the city's centennial celebrations in 1982. In addition, he hoped operating an N&W steam locomotive in the former Southern steam program could aid the relations of the merger of the two railroads.<sup>6</sup> No. 611 quickly became the star of the steam excursions, pulling up to eight hundred passengers at a time. When No. 611 returned to Roanoke, the steam crew properly "mothballed" the engine so it could sit on display without heavy deterioration.<sup>7</sup> It returned to the Virginia Museum of Transportation as one of its most popular static displays.

The Virginia Museum of Transportation (VMT) is a vastly different organization in terms of operations and goals than other counterparts such as the Tennessee Valley

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<sup>4</sup> Jim Wrinn, "Back in Black," *Trains Magazine*, March 2013, 25-7.

<sup>5</sup> Jim Wrinn, "Norfolk Southern's '21<sup>st</sup> Century Steam' program debuts today," *Trains News Wire*, accessed March 18, 2015, <http://trn.trains.com/news/news-wire/2011/09/norfolk-southerns-21st-century-steam-program-debuts-today>.

<sup>6</sup> David P. Morgan, "Finest Steam Ever Built," *Trains Magazine*, January 1983, 44-45.

<sup>7</sup> "About the 611," Virginia Museum of Transportation website, accessed March 18, 2015, <http://vmt.org/Loops-Collections/Steam-locomotive-Loop/Class-J-Steam-Locomotive-611.html>.

Railroad Museum. The Norfolk & Western Railway and the City of Roanoke, Virginia collaborated to establish a new museum dedicated to telling the history of regional transportation. The city designated a section of the publicly owned Wasena Park to house the new museum. It was a picturesque location along the Roanoke River and accessible to the N&W's belt line that ran along the south bank of the river. The city also approached other railroad companies for donations of older equipment.<sup>8</sup> The Roanoke Transportation Museum opened in 1963 to tell the story of transportation in the Roanoke Valley with an emphasis on its rich railroad history. The museum grew in popularity and notoriety throughout the 1970s, garnering the attention of state leaders. The Virginia General Assembly designated it as the official transportation museum of the Commonwealth of Virginia in 1983. This new honor prompted the museum's board to change the name to the Virginia Museum of Transportation.<sup>9</sup>

The museum is currently housed in the former Norfolk & Western freight station in downtown Roanoke. In 1985 Norfolk Southern leased the building to the museum after the previous site along the Roanoke River was heavily flooded, resulting in major damage to the collection and the loss of all administrative files. From its beginning, the VMT's goal has been to collect, preserve, and educate the public about the region's transportation history. The mission of the VMT is "to advance all modes of transportation across the commonwealth, to celebrate and preserve the hardwork and ingenuity of generations past, and to inspire current and future generations to value this industry

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<sup>8</sup> Brenda McDaniel, "The Little Museum that Might," *The Roanoker*, April 1981, 28-30, 32.

<sup>9</sup> "About the Museum," Virginia Museum of Transportation, accessed March 15, 2015, [http://vmt.org/our\\_story/about.html](http://vmt.org/our_story/about.html); Joe Kennedy, "Museum Board Oks name change for 'official' status," *The Roanoke Times and World News*, July, 11, 1985.

which is essential to Virginia's history, culture, and economic growth."<sup>10</sup> Unlike the TVRM, the VMT never sought to operate any rail equipment but merely preserve and present historic pieces of railroad rolling stock and motive power for display and interpretation. Its mission also does not focus explicitly on railroads but the transportation industry in general. Exhibits and galleries discussing Virginia's automobile and aviation industry complement the large collection of railroad equipment.

In 2011, a group composed of individuals from the original Norfolk Southern steam program approached the VMT's executive director, Beverly Fitzpatrick, about the possibility of restoring No. 611 to operable condition for the purpose of pulling excursion trains. Fitzpatrick and the museum's board of directors approved the formation of a special project committee to investigate the condition of the locomotive, form a business model, and locate the resources necessary to restore the locomotive. The project, entitled "Fire Up 611!," officially began on February 22, 2013. The following June, the committee and museum board announced their intention to start a massive fundraising campaign to restore the No. 611 and construct an on-site maintenance facility at a cost of \$3.5 million. The museum's limited financial resources prompted a public fundraiser; more than 3,000 donations from all fifty states and more than a dozen foreign countries encouraged the group. Norfolk Southern officially invited the VMT and 611 to join the 21<sup>st</sup> Century Steam Program and donated \$1.5 million towards the restoration effort with

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<sup>10</sup> "About the Museum," Virginia Museum of Transportation.

funds in hand. Restoration of No. 611 began in June 2014 with a slated completion time of nine months.<sup>11</sup>

The museum argued that support of the “Fire Up 611!” campaign would benefit local heritage tourism. Cities with vibrant heritage tourism sites and activities offer “strong building blocks revitalization, improvement, smart growth and sustainability.”<sup>12</sup> Since its origin in the 1960s, the VMT has attracted hundreds of thousands of people. Over the last ten years, however, it has received national attention for its efforts to conserve and restore its aging fleet of historic rail cars and locomotives, creating new visibility and increased visitation. In this case, preservation paid off. Over an eight-year period starting in 2006, attendance grew from 10,000 to nearly 50,000 paid admissions. One-third of that number are tourists from all over the country and around the world wanting to see Roanoke’s railroad heritage. Those tourists spend an estimated \$3.2 million dollars annually in the local economy. With the locomotive in operation, the VMT predicts its annual attendance will double to nearly 100,000 people over a five-year period boosting tourist revenue to approximately \$5 million.<sup>13</sup> The increased funding will go to capital and exhibit improvements at the facility.

The restoration of any industrial machine allows people the opportunity to see it meeting its functional purpose. Stagnant machinery only tells modern audiences what the

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<sup>11</sup> Mike Allen, “Transportation Museum Launches Study to Revive 611,” *The Roanoke Times*, February 23, 2013; Nick Ozorak “Interview with Scott Lindsay,” (MP3 podcast), The Roundhouse, April 4, 2015 accessed May 1, 2015, <http://theroundhousepodcast.com/2015/04/04/011-fire-up-611-scott-lindsay/>; “‘Fire Up 611!’ Donor packet,” Virginia Museum of Transportation, Roanoke, VA, 2014.

<sup>12</sup> Amy E. Facca and J. Winthrop Aldrich, “Putting the Past to Work for the Future,” *The Public Historian* Vol. 33, No. 3 (Summer 2011): 40, accessed March 30, 2015. <http://www.jstor.org/stable/10.1525/tph.2011.33.3.38>.

<sup>13</sup> “‘Fire Up 611!’ Donor packet,” Virginia Museum of Transportation, Roanoke, VA, 2014, p. 9; “Thomas E. Dailey Grant application,” Virginia Museum of Transportation, Roanoke, VA, p. 5.

piece looks like, not how it functions or its role within the industry. Unfortunately, money and safety concerns often prevent the larger pieces from operating, especially when the cost of restoring the machine to an operational condition overwhelms the potential return in admission fees.<sup>14</sup> Steam locomotives have the ability to showcase their industrial intentions while simultaneously educating spectators on how they operate.

In addition, interpretation cannot stop at how the machine operates. Brian Goodall, an expert in British heritage tourism, argues that to make industrial heritage sites more marketable for tourists, vintage machinery requires both restoration and interpretation. Operable machinery brings a new sense to comprehending its historical value, but interpretation in the form of panels, guided tours, or brochures fill the social and cultural void that is missing at most industrial museums.<sup>15</sup>

Furthermore, Goodall claims that scenic railways offer only a “passive” experience that will not instigate repeat customers nor does it create an active learning environment. Interpretation and educational activities are vital to secure visitors’ attention and ensure they return in the future. Interpretation at industrial heritage museums is often marginalized with most of the funding and resources going toward the conservation and restoration work.<sup>16</sup> The Southern steam program, for example, created a loyal fan base of railroad enthusiasts that followed the program throughout its existence due to the fact that most of them experienced the steam era of American railroading.

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<sup>14</sup> Goodall, 94-6.

<sup>15</sup> Ibid, 95.

<sup>16</sup> Ibid, 100-101; Lucy Taska, “Machines and Ghosts: Politics, Industrial Heritage and the History of Working Life at the Everleigh Shops,” *Labour History* No. 85, (Nov 2003): 72, accessed March 30, 2015. <http://www.jstor.org/stable/27515928>.

When that generation passed so too did the interest. To capture the attention of a contemporary audience that has never seen a steam locomotive nor has any previous appreciation for railroading, additional information must be supplied that gives further context of the world steam engines operated in and their contribution to society. With the museums and historical organizations now having more stake in the current program, it is critical these institutions create an active experience that immerses riders and patrons into the broader context of industrial history. In several ways Norfolk & Western No. 611 acts as a tangible piece of transportation history and highlights the intangible connections between industry and cultural and social change.

#### No. 611 as an Industrial Artifact

Several Virginia railroads merged to form the Norfolk & Western Railway in 1881. The company selected the town of Roanoke as its base of operations because Roanoke was at the junction for three consolidated railroads. In addition, the Roanoke Machine Works built much of the equipment that operated on the line. In 1897 the N&W acquired controlling stock in the machine works, which became a company institution, and renamed it the Roanoke Shops. The N&W was renowned for building its own fleet of locomotives, eliminating the need to alter locomotives from major builders for their own specifications. At the height of the Roanoke Shops' output, they employed over three thousand locals. The N&W was a relatively small line when compared to other eastern lines like the New York Central or Pennsylvania Railroads. Its main source of revenue was transporting coal from the mines in the Appalachians to the ports for national and

global distribution. The unrelenting need for coal made the N&W a small but well financed railroad company.<sup>17</sup>

The terrain in which the N&W operated and its sparse population never gave the company much potential in passenger revenue. In spite of this lack of financial gain, the N&W was, according to historian Maj. Lewis Jeffries, “never unmindful of the people along its tracks,” providing passenger service throughout its system.<sup>18</sup> For most of the early twentieth century, the company used its Class ‘K’ 4-8-2 locomotives to power the passenger trains up and down the grades of the Blue Ridge Mountains and across the state of Virginia to the Atlantic coast. By the late 1930s, these aging locomotives needed to be replaced and the N&W wanted to invest in new engines to meet the rising demands in passenger traffic. The company turned to their staff of mechanical engineers to create a brand new locomotive capable of more speed, more tractive effort, and a smoother ride.<sup>19</sup>

The Roanoke Shops incorporated many of the upgrades into the new passenger engine that they had implemented on their Class ‘A’ express freight engines. Russell G. Henley, head of motive power for the N&W from 1928-1954, started out as a machinist and moved up through the mechanical ranks with little formal education. Under Henley’s regime, the N&W created some of the finest steam locomotives ever built in the United States.<sup>20</sup>

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<sup>17</sup> Maj. Lewis Ingles Jeffries, *N&W: Giant of Steam* (Boulder, CO: Pruett Publishing, 1980), 2-10; Ed King, *Norfolk & Western in the Appalachians: From Blue Ridge to Big Sandy* (Waukesha, WI: Kalmbach Books, 1998), 5-7.

<sup>18</sup> Jeffries, 228.

<sup>19</sup> *Ibid*, 228-30.

<sup>20</sup> Morgan, “Finest Steam Ever Built,” 49.

There were five basic components to building modern steam locomotives on the N&W. The first was constructing a high-capacity boiler to increase the amount of steam being created. Second, Henley installed roller bearings on all locomotive driving axles and all axles on the tender for a smoother rider and quicker acceleration capabilities. Third, the company created a single piece of cast iron for the locomotive's frame, establishing a rigid, more durable structure. Fourth, Henley implemented greater attention to establishing better counterbalance for speed and power. Finally, Henley added a mechanical lubricating system on the engine, eliminating the need for long stops to oil the rods and cylinders. The resulting locomotives were more efficient than ever before, leading to faster operations saving time and money. As a result, the N&W was able to "dieselize without diesels" thereby continuing good relations with its top clients in the coal industry.<sup>21</sup>

The first five Js, Nos. 600-604, were produced from October 1941 through January 1942. They received a 4-8-4 wheel arrangement: four pilot wheels to guide the engine around curves, eight driver wheels providing enough power to navigate the mountainous terrain, and four pony trucks to support the weight of the massive firebox. The first batch could reach 275 pounds per square inch (psi) and were capable of traveling upwards of 110 mph with a fifteen-car train along straight, level tracks. The demands of World War II called for more locomotives. The N&W ordered six more J engines but without the streamlined shrouding. They were classified as 'J-1' freight engines to comply with war rationing protocol. Towards the end of the war, the N&W

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<sup>21</sup> Morgan, "Finest Steam Ever Built," 49-50; David P. Morgan, "The Morning After Steam," *Trains Magazine*, September 1959, 27.

overhauled the ‘J-1s’ reclassifying them as ‘Js.’” In addition, the company improved all of the engines to reach 300 psi with a new potential of 80,000 lbs of tractive effort. The N&W Class J became the most powerful passenger steam locomotive in the world.<sup>22</sup>

The sharp increase in wartime traffic prompted the railroad to revitalize its passenger operations. In the late 1940s, the N&W launched a new all-coach luxury passenger train from Norfolk to Cincinnati christened the *Powhatan Arrow*. To pull the new streamlined train, the N&W ordered three more J locomotives. While the Norfolk & Western continued to invest in new steam locomotives, the rest of the rail industry was shifting their remaining steam engines to pull secondary trains until they could be replaced with newer diesel-electric locomotives. In May 1950, diesel locomotives powered 57.3% of the passenger trains in the United States. That same year, railroads added 171 new diesel engines to their passenger rosters and only three steam locomotives. Those steam locomotives were the last order of N&W J engines, Nos. 611-613.<sup>23</sup> The Class Js embodied the pinnacle of steam technology. They traveled upwards of 15,000 miles per month, requiring little maintenance or time in the shops. The Js were the pride of both the company executives and the workers. The Norfolk & Western’s commitment to its fleet of steam locomotives was unmatched in the American railroad industry. A prime example of this commitment is the company’s reaction to the wreck of J No. 611 in 1956.<sup>24</sup>

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<sup>22</sup> Jeffries, 230-233.

<sup>23</sup> Morgan, “Morning After Steam,” 28-29.

<sup>24</sup> Jeffries, 237-40.

On January 23, 1956, No. 611 was pulling the *Pocahontas*, the N&W's overnight Pullman train from Norfolk to Cincinnati, when it wrecked outside of Cedar, West Virginia. The train sped around a large curve too fast resulting in the engine flipping on its side and sliding down the embankment nearly falling into the Tug River. Five of the cars also derailed behind the engine. The locomotive engineer was killed and several more crew and passengers were injured. Rather than easily scrapping the engine, the N&W brought in a steam crane and transported the locomotive back to its main shops in Roanoke for a complete rebuild. The company repaired No. 611 and returned it to operating passenger trains.<sup>25</sup>

#### No. 611 as a Product of the Streamlined Era

In addition to creating a new, modern passenger steam locomotive, the N&W intended to utilize the industry trend of incorporating a streamlined design for a more aesthetically pleasing locomotive. The design of a steam locomotive typically relied on its mechanical pieces for efficient use and maintenance. In the face of new competition, railroads started experimenting with streamlined designs on the new diesel-electric locomotives. The new, curved lines started a trend that blossomed throughout the industry. Railroads still loyal to steam and the coal industry, especially eastern lines, embraced streamlining but redesigned their steam locomotives rather than investing in diesel technology. The steam piping and mechanical devices were hidden underneath

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<sup>25</sup> "N&W 611 Class J. Steam Locomotive National Historic Mechanical Engineering Landmark May 1984," ASME, accessed March 15, 2015, <https://www.asme.org/getmedia/1b51cf60-8722-4a24-9ec6-504ffed35f95/94-Norfolk-Western-611-Class-J-Steam-Locomoti.aspx>; "Report 3676," ICC, accessed March 15, 2015, <http://home.comcast.net/~hoboron/test/icc-report.htm>.

shrouds of metal creating a new, innovative aerodynamic look on top of the older steam technology. Railroads usually left these designs to classically trained industrial designers such as Richard Dreyfuss or Raymond Lowey but the N&W kept to its tradition of using its own men and resources for engineering its equipment.<sup>26</sup>

The company approached Frank C. Noel of the passenger car department to sketch a design for the N&W's new passenger locomotive. Noel looked to other railroads' streamlined designs for inspiration. His first sketch provided streamlined skirting along the sides of the locomotive and a different nose cone similar to the Southern Pacific Railroad's GS-type steam locomotive. N&W officials felt that design was not fancy enough and looked too similar to the outdated 'K' class engines. They wanted something that captivated the attention of both passengers and bystanders. For his second design, Noel created a near double of Henry Dreyfuss' designed streamlined Hudson engine that pulled the New York Central's world renowned *20<sup>th</sup> Century Limited*. Dreyfuss covered the entire engine in a streamlined shroud with a crescent-shaped prow on the front of the locomotive. N&W officials felt this design was too fancy and did not reflect the spirit of the company. Noel's third and final sketch combined the previous two with simple, clean lines and a rounded nose. The design was attention grabbing but not overly flamboyant. Noel used the paint scheme from an earlier design for the new passenger engine. The locomotive was painted black to help mask the coal soot with a

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<sup>26</sup> Karl R. Zimmerman, *20<sup>th</sup> Century Limited* (St. Paul, MN: MBI Publishing, 2002), 74-75.

Tuscan stripe running down the length of the engine and tender with yellow inlay and “Norfolk & Western” lettering.<sup>27</sup>

### No. 611 as a Transition Era Artifact

Despite the mechanical efficiency and corporate pride, the N&W executives realized that their passenger operations were losing money. In the mid-1950s, the company spent \$1.55 for every earned passenger dollar, largely because of the continued use of the steam locomotives. The revenues from the coal industry supplemented the losses from passenger service but company executives were determined to cut costs. The end of N&W steam came in 1957 when President Robert “Racehorse” Smith, a champion for N&W steam, stepped down as company president. Stuart Saunders succeeded him. Unlike Smith, who had an operational background, Saunders came from the N&W law department believing in cost efficiency over steam technology. As soon as Saunders came into office, he ordered 198 new diesel-electric locomotives to replace the N&W’s fleet of 262 operational steam engines. He ordered an additional 268 diesel-electric locomotives and promised his shareholders that the N&W would be fully dieselized by 1960. While his orders were being filled, Saunders leased passenger diesel locomotives from neighboring railroads to start training crews on the new diesel engines.<sup>28</sup>

Officials slowly took the Class ‘Js’ off the premiere trains and relocated them to pull freight trains until the flues in the boilers needed replacement. Since No. 611

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<sup>27</sup> Jeffries, 229-230.

<sup>28</sup> Morgan, “Morning After Steam,” 27-28.

received a major overhaul only three years earlier, its flues had much longer service capabilities than any of the other 'Js' resulting in its selection as the locomotive to pull the N&W's "farewell to steam" excursion trains in 1959. Once the excursions were over, officials were unsure of the ultimate fate of 611. Several people reached out to President Saunders to spare one of the 'Js' either for preservation or occasional use on excursion trains. Famed New York photographer O. Winston Link, who had photographed the last years of steam on the N&W, asked for a right of first refusal on the locomotive should the company ever decide to sell it. Both Graham and Bob Claytor wrote numerous letters to Saunders requesting No. 611 be saved from the scrap line. Saunders relented and authorized No. 611 to serve as a back-up steam generator at the Roanoke Shops until its flue time ran out.<sup>29</sup> The sole surviving J transitioned from being the pride of the company's fleet of locomotives to an obsolete object taking up space in the shops.

#### No. 611 as Vehicle for Change

No industry was free of the racial bias and perceived gender roles that existed in the early twentieth century. The railroads reflected the times and were guilty of indulging in discriminatory hiring practices preferring white males to anyone else for the more glamorous positions. African American railroad workers were limited to working service positions such as porters and red caps in stations helping people with their luggage. Those who worked in the operations department served as engine wipers, worked in track gangs or assisted in the mechanical shops as day laborers performing the physically

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<sup>29</sup> Jim Wrinn, *Steam's Camelot* (Lynchburg, VA: TLC Publishing, 2000), 2-4.

exhausting jobs. These jobs offered no chance of advancement or promotion to managerial roles within the company. Consequently, there was an unwritten rule that no black man could ever receive the honor of working as locomotive engineer. There was an understood hierarchy among railroad employees with engineers and conductors ranking at the top above all others. These hiring practices endured through the 1960s only changing after the Civil Rights Acts of the 1960s.<sup>30</sup>

The steam excursion program also reflected the railroad hiring practices throughout its duration. For the first phase, older white males managed both the program and the historic trains themselves. These individuals experienced the steam era first hand and were crucial for operating the trains safely. As the program aged, however, younger railroaders came in and learned the mechanics, maintenance, and operation of steam locomotives from the previous generation.<sup>31</sup> The evolving hiring practices of the railroad gave previously discriminated demographics the chance to operate the equipment they had been banned from operating.

One such individual was John A. Nutter, an African American locomotive engineer who worked for Norfolk Southern. Nutter grew up in Roanoke, Virginia and lived by the East End Shops where the company built and serviced its fleet of steam locomotives. His mother worked as the commissary attendant in Union Station. He spent a lot of time also at the station watching the trains come and go wondering about the distant places they were travelling. He became infatuated with the locomotive engineers, in part because they portrayed a sense of arrogance to their fellow employees. They were

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<sup>30</sup> For discriminatory practices of railroads see Theodore Kornweibel, Jr., *Railroads in the African American Experience* (Baltimore, MD: John Hopkins University Press, 2010).

<sup>31</sup> Wrinn, *Camelot*, 95-8.

the ones selected to operate the machines that brought in the money and carried the passengers. Nutter told his mother that he was going to be an engineer for the N&W someday and travel all over the region. She did not have the heart to tell him the truth of his prospects with the railroad.

After working for years as a Greyhound bus driver, Nutter decided to apply as a brakeman for the N&W's successor company, Norfolk Southern. He was hired and served brakemen duties for a year and a half when he put in a bid to attend engineer school in Atlanta, Georgia. Nutter was selected and he became a certified locomotive engineer working out of Roanoke on the Radford Division. Before his mother passed away, Nutter was able to tell her that his dream of becoming a locomotive engineer would be a reality. At the time, Nutter was only one of a handful of African American engineers but more were hired during his tenure.<sup>32</sup>

While on a layover in Bluefield, West Virginia, officials assigned Nutter to serve as the division liaison for the excursion train ferry run to Roanoke. Division liaisons always accompanied the steam crew in the cab serving as guides for that particular route. Nutter had ridden excursion but never had the chance to ride in the steam locomotive's cab. No. 611 was assigned for that trip so Nutter climbed into the cab for the trek to Roanoke. While in the cab, he jokingly mocked the engineer's use of two hands to move the throttle to which the engineer replied, "sit down." For thirty miles, Nutter sat in the engineer's seat; one hand on the throttle the other on the whistle chord. Nutter recalled the experience later:

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<sup>32</sup> Sheree Scarborough, *African American Railroad Workers of Roanoke* (Charleston, SC: The History Press, 2014), 77-79, 80-84.

So for approximately thirty-plus miles, I operated 611. And while I was doing that riding through the countryside and waving out the window and blowing the whistle, it came to me that at one time, it was stated that a black man would never touch the throttle of an engine on [the] Norfolk & Western. I was sitting there wondering how many times the person that said that flipped over in his grave.<sup>33</sup>

He gave controls back to the engineer for the approach to Roanoke with a much larger appreciation for the men who operated steam locomotives on a regular basis. Nutter also recalled that the fireman for that particular journey was one of the regulars for the steam program, a young woman.<sup>34</sup>

Women were also limited in their employment opportunities with the Norfolk & Western. Women worked in some capacity with the railroad since the mid-nineteenth century, primarily as telegraphers or station agents. Their job opportunities typically were limited to those of secretaries or executive assistants with no chance of working on an engine crew. Similarly, there was no possibility of promotion up the corporate ladder to managerial or executive positions. Wartime gave women the chance to work more jobs for the railroad. During World War I in 1918, the number of women that worked for the railroad jumped from 60,000 to 100,000 within a ten-month period. Of those jobs, about half worked as telegraphers, clerks, stenographers, and accountants. More than 4,000 worked in the “proverbial occupation of cleaning” in both station houses and in the car shop ensuring the Pullmans were suitable for the next trip.<sup>35</sup> An additional 3,000 women worked in various capacities around the mechanical shops as day laborers, mechanics,

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<sup>33</sup> Scarborough, 86.

<sup>34</sup> Personal communication with John Nutter, Norfolk Southern locomotive engineer, March 10, 2014.

<sup>35</sup> Pauline Goldmark, “Women in Railroad Service,” *Proceedings of the Academy of Political Science in the City of New York* Vol. 8, No. 2 (Feb. 1919): 17-19, accessed March 30, 2015, <http://www.jstor.org/stable/1172145>.

crane operators, engine wipers, and turntable operators. The type of jobs available to women often depended on the geographical location of the company.<sup>36</sup>

Of the 100,000 female railroad workers during World War I, only 8,000 worked in the southern region of the United States.<sup>37</sup> Some southern companies limited their female employees to clerical work while others flaunted their token woman working in the field. The Norfolk & Western put a picture of Rose Rasmussen on the cover of its company magazine from 1923 dubbing her the “N&W Girl.” Rasmussen worked in the Car Record Shop in Roanoke, Virginia at the young age of eighteen. She’s described as embodying the “spirit of the N&W family,” showing, “enthusiasm, pep, loyalty, determination, confidence, [and] dependability,” in her work.<sup>38</sup> However, the image shows Rasmussen hanging off a railcar with her hat pulled over her eyes and shoes not fit for operating large, industrial equipment. It seems she is merely dressing up as a railroad worker rather than actually working as one. Railroads did allow women to work in almost every capacity around the steam locomotives, but they were never given the opportunity or privilege to fire or operate the engines. Women finally got the chance to be locomotive engineers in the 1970s long after the end of the steam era.<sup>39</sup> However, the Southern and Norfolk Southern steam program gave the chance for a new generation of men and women the chance to operate the historic equipment.

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<sup>36</sup> Goldmark, 19.

<sup>37</sup> Ibid.

<sup>38</sup> “N&W Girl,” Norfolk Southern, accessed May 6, 2015, <http://norfolksouthern.tumblr.com/page/7>.

<sup>39</sup> “Timeline of Women in Transportation History,” United States Department of Transportation, accessed May 6, 2015, <http://www.dot.gov/womenandgirls/timeline/accessible>.

Cheri George, a young woman from Richmond, Virginia, accompanied her older brother to see the steam locomotive that was in town pulling a special excursion train, Southern No. 4501. The sights and sounds of No. 4501 caused an instant fascination with steam locomotives and railroading. She followed the excursion program throughout her adolescent life talking with the steam crews whenever she could. When she was a college student, George remarked to the crew one day that the steam engine was too dirty, insinuating that someone should clean it. The crew said she was welcome to do so and the next day she washed all 108 feet of Norfolk & Western Class A No. 1218. Her tenacity impressed the steam crew so much they agreed to bring her on as a volunteer apprentice. Employees could host volunteers training them to operate the engines during excursions. At the time, Cheri was a full-time student at Virginia Commonwealth University in addition to having a full-time secretarial job. In spite of her hectic schedule, she could not resist the opportunity to work on and fire the excursion engines. She worked with the steam program from 1990 to its demise in 1994 serving as a fireman on both N&W Nos. 1218 and 611.<sup>40</sup>

George's time with the Norfolk Southern steam program gave her opportunities no other woman got to experience with the Southern or Norfolk & Western Railways. According to George, she felt her gender was not a consideration to the rest of the crew in terms of her job performance. Those outside of the steam department, however, complained that a woman was allowed to work as a fireman still recognizing that the members of the engine crew should be reserved for males. George did not pay attention

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<sup>40</sup> Personal communication with Cheri George, "Fire Up 611!" Committee member, June 25, 2014.

to her critics and continued to do what she loved not thinking of herself as someone who paved the way for other women to become involved with railroad preservation.<sup>41</sup> People like John Nutter and Cheri George took advantage of opportunities that were not available to them only a generation before. In spite of previous prejudices, there was at least one occasion where an African American was at the throttle of a steam locomotive with a woman serving as his fireman.

In addition to the restoration of the N&W No. 611, the Virginia Museum of Transportation is planning a new preservation and education facility in the rail yard behind the museum. The facility will provide a climate-controlled environment to work on the locomotive when it is not in service and to perform conservation work on other historic rail equipment in their collection. Additionally, the building will feature exhibits that interpret both the history of the locomotive and the crucial role railroads played in building the country, especially their connections to the city of Roanoke. The facility's design will be reminiscent of a Norfolk & Western "lubritorium" building that was used for express servicing of locomotives during the steam era. The architecture will complement the larger freight station that houses the museum and complement the railroad built landscape of downtown Roanoke.<sup>42</sup>

The VMT wants to ensure that people see No. 611 on and off excursions. In the previous program, the steam shop at Norris Yard was off limits to the public so they only saw the machines operating on the mainline. The education facility allows people to view

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<sup>41</sup> Ibid.

<sup>42</sup> "Fire Up 611! Donor packet," 10; "Thomas E. Dailey Grant application," 7.

the amount of work needed to keep a sixty-five year old machine maintained, using both modern and antique tools and equipment. Experts are currently restoring 611 at the North Carolina Transportation Museum in Spencer, North Carolina. Visitors are able to view the restoration area from a special viewing area. Members of the restoration crew offer weekend tours where people have the chance to get closer and talk with the men and women who are volunteering their time to the restoration. The VMT also offers periodic bus tours that take people on a day trip from Roanoke to Spencer where they can view the progress of the restoration.

Museum officials intend to use the new revenue and interest of the operable No. 611 to revise their core galleries within the museum. Several exhibits have not been updated since 1985. The staff is committed to new exhibits thereby telling a fuller story of transportation's impact on society and culture.

On February 14, 2015, the museum opened its newly renovated exhibit on African American railroad workers on the Norfolk & Western. The exhibit began in the late 1990s as an oral history project recording the memories of African Americans who worked for the railroad during the days of Jim Crow. While the exhibit was groundbreaking for its time, it eventually became a "wall of honor" with small quotes and little context about the daily lives of these men. Over a two-year period, the museum worked with the African American Norfolk & Western Celebration Group that regularly meets at the museum to create a new exhibit that captured the obstacles and triumphs of black railroad workers over the last century.<sup>43</sup>

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<sup>43</sup> Personal communication Denna Sasser, curator for the Virginia Museum of Transportation, March 17, 2015.

The nostalgia elicited by an operable steam locomotive has the power to make people stop and reflect on the past. The Southern and Norfolk Southern Railways exploited that nostalgia by building a public relations program that connected people with modern railroading through historic equipment. What the original program lacked, however, was the additional interpretation needed to communicate to the audience what they were seeing in a broader, historical context, as Michael Bezilla writes, “Railroad history is a conduit through which we have the opportunity to learn about the past in ways that go far beyond engines and rolling stock...”<sup>44</sup> Behind the locomotives and rolling stock that represent the American railroad industry are workers, families, cities, towns, and commerce. In the case of Eveleigh Workshops, a former Australian locomotive engine house turned industrial heritage site, the managerial foundation placed conservation above interpretation. Lucy Taksa summarized their interpretive shortfalls, “Emphasis on the conservation of material culture, without adequate attention to and funding for interpretation, has concealed the workers’ experiences beneath Eveleigh’s tangible heritage.”<sup>45</sup> Without taking interpretation into consideration, No. 611 will suffer a similar fate as the Eveleigh Shops, glorifying the nostalgia of American railroading without providing adequate context of the people it served.

The Virginia Museum of Transportation’s “Fire Up 611!” campaign possesses great potential to revive interest in railroad history. The overwhelming success of the first

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<sup>44</sup> Michael Bezilla, “Railroad History: It’s Not (Only) about the Train,” *Pennsylvania Legacies* 4, No. 1 (May 2004): 32.

<sup>45</sup> Lucy Taksa, “Machine and Ghosts: Politics, Industrial Heritage, and the History of Working Life at the Eveleigh Workshops,” *Labour History* No. 85 (Nov. 2003): 84.

phase of the massive project proves the locomotive's current appeal. Without proper interpretation of the various aspects of history the locomotive can tell, however, Class J No. 611 is nothing more than an operable historic vehicle. By using it as a tool to tell the history of transportation, it will keep its public draw and build a broader audience ensuring further interpretation for future museum patrons.

## CONCLUSION

The survival of a relative handful of steam locomotives on the American landscape in the sixty plus years since their active use says something important about the power of steam technology's ability to captivate and entertain a modern audience. The imagery and stories of labor strikes, corrupt management, and high fares were replaced by the imagery of Pullman cars and streamlined trains and the lyrics of "Wabash Cannonball" and "Orange Blossom Special." The constant struggle between modernity and tradition created the nostalgic views of steam locomotives and rail travel. It was this same nostalgia that prompted the creation of railroad historical groups and a new niche of museums to save and preserve pieces of historic rail equipment deemed obsolete for modern service. These dedicated groups formed the foundation for the mainline steam excursion movement that promoted the nostalgic, fanciful views of American railroading through large public spectacles. While they provided a unique experience and promoted railroad preservation, the excursions provided limited and inadequate interpretation of the role of the steam locomotive in American history.

Historical museums have a fundamental responsibility to portray their material with accuracy and inclusiveness. The current trend in transportation museums, railroad museums especially, is to promote the history of the larger artifacts in their collections, such as automobiles and freight cars, above the histories of the men and women who designed, built, and used them in their daily lives. Through collaborative efforts with corporations and non-profits, a new era of interpretation can begin that draws on the public fascination with steam locomotives to attract new audiences to a broader story.

Additionally, museum staff can provide interpretive materials on all excursions reinforcing that broader, inclusive narrative. The historical context complements the sensory experience of an operational steam locomotive stimulating both the mind and physical connection with the mechanical artifact. The merits of a transportation museum possessing an operational steam locomotive are enough that the possibility should be considered. This decision, however, should not be taken lightly.

Museums and non-profit organizations lack the capital to restore and maintain steam locomotives without a proven business model to maintain revenue. Mainline excursions only operate a handful of times each year at the host railroad's discretion resulting in inflated ticket prices upwards of three hundred dollars to cover the costs for a four to six hour trip. This limits the number of people that have the financial means to buy tickets but also makes the trips feel selective for those lucky enough to be on the train, similar to the deluxe, named trains of the 1930s and 1940s. When not pulling excursions, museum managers need to find additional ways of income with an operable steam locomotive and planning for the next round of excursions.

Restoring the locomotive is only the first phase of running a successful steam program. The Southern Railway and later the Norfolk Southern Corporation had the luxury of a massive staff and corporate dollars to plan and organize the excursion trips. With its 21<sup>st</sup> Century Steam Program, Norfolk Southern provides support but most of the logistics are left to the non-profit organizations that own and operate the steam locomotives. An estimated 3,000-4,000 hours goes into planning, organizing, and executing even one excursion. Staffing the train also constitutes the recruitment of dozens of people willing to forego a weekend of leisure to volunteer. In addition to the engineer

and fireman, excursion trains also require a conductor, engine crewmembers, a pilot crew, excursion director, excursion manager, train chief, car hosts, dispatchers, paramedics, and security. Without a competent manager overseeing the budget and organizing the various duties of the train, the whole trip could fall apart losing the good will of the passengers and damaging the relationship with the host railroad. Successful trips are those that are planned well in advance with people in positions that know what they are doing and can make quick decisions.

Mainline steam excursions bring railroad and industrial preservation to a massive public setting not available in any other method of industrial heritage. They have the ability to spark interest in the history of railroads and transportation that will, in turn, send people to museums and become involved with local preservation efforts. The landscape on which the excursions operate takes on new meaning about the role of the railroad and how it helped shape the very territory around the right-of-way. Derelict stations and other railroad structures could potentially be rehabilitated in the wake of excursions running through and passengers seeing them in their poor state.

Steam locomotives not only serve their mechanical function when restored to operation, they also serve as a tool for promoting local heritage tourism. Layovers in small towns instantly bring four to six hundred passengers into a small town for lunch and shopping. Hundreds more pursue the train in their own personal vehicles for photographs and video opportunities stopping along the way for meals at the local eateries. The local economy gets a boost whenever a steam locomotive pulls through town.

The restoration and operation of steam locomotives on special mainline excursions parallels both the history of American railroads and railroad preservation. Once deemed obsolete machines of industry, steam locomotives can now serve as interpretive tools for industrial and cultural history and act as beacons for heritage tourism. They can only achieve this potential, though, if removed from static display and restored to operation.

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