PIEDMONT AND NORTHERN RAILWAY STATIONS

by

JOHN ROBERT CRAWFORD IV

(Under the Direction of Mark Reinberger)

ABSTRACT

The Piedmont and Northern Railway was an electrically powered interurban short line that operated in two physically separate divisions in North and South Carolina from 1910 to 1969. The railroad's success depended on its ability to provide better service to local customers than could its larger competitors, and it represented this service-oriented attitude with the construction of modest yet attractive passenger stations. The Piedmont and Northern was the only electric intercity carrier to develop in the South and thus of great historical significance at both the local and regional level. This thesis discusses the history of the railway and documents its stations, with special attention given to the few that remain. As communities in the Carolinas face increasingly complex issues of transportation in the twenty-first century, Piedmont and Northern stations are worth studying not only in their own right as valuable historic resources, but also as key elements in the future of regional transportation.

INDEX WORDS: Railroad history (United States), Architectural history, Historic preservation, Recent past, Passenger stations, Depots, Piedmont and Northern Railway, Interurban

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Maureen Grasso Dean of the Graduate School The University of Georgia December 2005 In honor and memory of my grandfather, Franklin Way.

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I am equally grateful to former P&N Vice President Thomas G. Lynch and former General Manager Frank M. Sellers for each taking the time to speak to with me about the railroad and its history. Mr. Lynch wrote the first company history, "Piedmont Prodigy: The Story of the Piedmont and Northern Railway," originally circulated within the company and subsequently published in series in *Trains* magazine in 1954. The above two works alone constitute the entire official history, and the overwhelming bulk of my knowledge, of the company. I would also like to thank Mrs. Marilyn Schuster, Special Collections Librarian at the Atkins Library of the University of North Carolina at Charlotte, for her time, effort, and genuine interest in assisting me in digging through box after dusty box of archived company records.

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TABLE OF CONTENTS

		Page
ACKNO	WLEDGMENTS	V
INTROD	DUCTION	1
СНАРТЕ	ER	
1	AMERICAN RAILROAD STATIONS	5
	Introduction	5
	Architectural History and Development	13
	Illustrations	
2	THE PIEDMONT AND NORTHERN RAILWAY	92
	History	92
	Illustrations	121
3	SURVEY OF PIEDMONT AND NORTHERN STATIONS	
	General Character	
	Charles Christian Hook	
	Architectural Description	
	General Disposition	
4	RECOMMENDATIONS AND CONCLUSION	
	Adaptive Reuse	
	Recommendations for Further Research	
	Conclusion	161
5	CATALOG OF STATIONS	

Catalog	
Illustrations	
Location Maps	
BIBLIOGRAPHY	

INTRODUCTION

The railroad station is a unique building type and one which, in both function and mythology, is without precedent. Between 1850 and 1930, passenger train travel was the catalyst of America's rapid geographic and economic growth, and, as works of both architecture and engineering, the stations that served this boom represented a new type of building, one that created unique problems and spawned equally unique solutions.¹ The passenger station exemplifies American architectural development in ways no other building can, perhaps because, unlike other public spaces, our lives once were more intimately associated with it. Today, our technological advances are more rapid, but they occur in less visible fashion. Railroading in the late nineteenth and early twentieth centuries, though, was *highly* visible; it passed within feet of daily life, waking sleepers, interrupting the preacher, or stirring the clothes on the line. It was big, it was loud, it was smelly, and it was tangibly mechanical. Most of the "guts" of a steam engine were on the outside; the physics involved in moving hundreds of tons with such a thing unfolded at eye level, within arm's length, and anyone who had ever boiled water had some idea of what made the thing go. Keeping it going became a way of life for generation after generation of railroad men, firmly rooting the railroad in society regardless of race, class, or education.

As the official medium through which the public could witness the railroad phenomenon, the depot quickly became one of the most important urban buildings as nineteenth century America moved rapidly from a rural agricultural nation to an urban technological one. The depot was the portal for all this activity; it was the gateway to the world. Everything from mail to

¹ Potter, Janet Greenstein. Great American Railroad Stations, p. 1.

visitors to new farm implements came and went by rail.² Over the better part of 130 years, passenger stations hosted mundane and momentous occasions alike: commuting to work, going off to war, greeting family from out of town. "Railroad stations reflected the diverse and shifting society around them. They made a distinct comment about the prosperity, hard times, or values of a community."³

In January, 1911, a Buick cost \$550 and a decent house rented for \$15.00 a month.⁴ In the Carolinas, James Duke and William States Lee were making plans for a railroad that would balance the latest technology with the social values and economic needs of a rural region. The Piedmont and Northern Railway would serve the emerging industrial centers of North and South Carolina by providing them with swift, clean, economical transportation that would expand the region's industries and increase its access to northern markets. Duke and Lee were believers in "progress;" they intended the railroad to provide a valuable service and to contribute to the general improvement of the region.

Part and parcel of that contribution were the stations that would represent the P&N in these growing communities. A noted Charlotte architect was hired to design stations that would be aesthetically pleasing without being ostentatious; in the conservative and largely blue-collar society of the Piedmont, a simple but attractive design was needed that would equate "this" building with "that" railroad and its mission.

The purpose of this study is to examine the railroad and chiefly to ascertain how many of its stations remain, to document their current status, and to point the way to their future as significant cultural resources. To that end, research has consisted of reviewing official histories of the railroad, interviewing their authors, interviewing former railroad employees, and

² Halberstadt, Hans and April. *The American Train Depot and Roundhouse*, pp. 9-10.

³ Potter, *op. cit.*, p. 2.

⁴ Lynch, Thomas G., *Piedmont Prodigy*, p. 3.

examining what remains of company records. It has also involved extensive exploration, both behind the wheel and on foot, of numerous Piedmont towns and cities. As far as is known, this project represents the only attempt at compiling a complete overview of all known P&N stations and the only work focused specifically on the stations of that railroad.

Several challenges have been encountered that are worth mentioning. First, the papers of key individuals involved in the establishment the railroad have been dispersed or destroyed. Second, the most common obstacle one encounters is that both documentary and physical evidence of any railroad, and this one in particular, is highly perishable. Railroad geography changes slowly but steadily; it has been nearly forty years since the P&N was absorbed into the Seaboard Coast Line Railroad, more than fifty since P&N stations were used in daily passenger service, and almost one hundred since they were built. Even among railroad buffs, the Piedmont and Northern is little known. In the general public of the communities it once served, it is almost entirely unknown. Third, since 1969, Seaboard Coast Line has merged several more times, gradually evolving into CSX Transportation, and relevant records of predecessor lines are now virtually non-existent. The built environment has changed drastically; city centers have reshaped themselves at least once, and much of what was once open farmland is now sprawling suburb.

However, it is precisely *because* the foregoing conditions prevail that this study is important. Only a handful of the P&N's original stations remain; of those, how many will survive another five years? Of those that survive, how many will be integral parts of their communities? Will they be static streetscape decorations – "eye candy" – or can they again perform an essential service as well, as they were intended? It is important to document the P&N and its stations partly for the sake of posterity, as it is for any historically and culturally significant landmark. However, it is crucial to make planners and the public aware of what is

available to them, that they may build on the heritage these buildings represent as they plan for the future. James Duke and States Lee believed in progress and improvement, values which post-modern society often rejects. But those who preserve, those who rehabilitate, those who conserve the environment – all do so out of a desire to "improve," to build a better future. Build to serve; serve to build. That was the kernel of the idea that was the Piedmont and Northern Railway; and, although we might interpret it somewhat differently today, it is still a valid guiding principle. Not only do P&N stations represent the heritage of their communities and an entire region, they offer a unique opportunity to capitalize on that heritage for a better future.

CHAPTER ONE

AMERICAN RAILROAD STATIONS

(Illustrations begin on page fifty.)

INTRODUCTION

After the invention of the telegraph, the depot served many communities as an informal town center, where gossip was as much a commodity as the election results or livestock market reports that came in over the wire.1 "The railroad telegraph was...contact with the outside world... Train time was what everyone kept time by."² Indeed, in a powerful example of the extent to which railroading has shaped our national identity, "standard" time was the invention and decree of the railroads. According to the Association of American Railroads (AAR), the United States was, by 1870, comprised of between eighty and one hundred separate time regions. It was not unusual to find different times kept even within a single city. This was especially evident at railroad stations, where all of the railroads utilizing the station had clocks, each of which in turn was set to the time kept by its railroad's home office. Thus a New York Central clock in Chicago would be set to the time kept in New York City, and it is not difficult to imagine the ensuing confusion such a system would create. There were, for instance, three separate times kept in Buffalo, New York, and six in Pittsburgh.³ That system presented a serious obstacle not only to passengers, but also to the railroads, which needed to operate safely and efficiently, and prompted them to divide the country into "Standard Railway Time Zones

¹ Potter, Janet Greenstein. *Great American Railroad Stations*, pp. 6-9.

² Solomon, Brian. Railroad Stations, p. 26.

³ Hill, Gertrude W., ed. The P&N and D&S Magazine. October, 1948, p. 7.

(Eastern, Central, Mountain, and Pacific).^{"4} This somewhat imperialistic plan, which also led to the practice of designating of some watches as "Railroad Approved," emerged from a convention held by representatives of American Railroads in St. Louis in 1872 and was implemented by six hundred railroad companies in 1883. It was not immediately accepted in all quarters; it was denounced by many as an affront to the Almighty, flying in the face of "one of the immutable laws of God."⁵ Newspaper editorials further drew attention to the idea that

from now on people would not only travel by railroad time, they would also be born, live, marry and die by railroad time. Even the sun, moon, and stars, some wrote, would have to rise and set by railroad time!⁶

Despite such resistance, and even though the U.S. government did not formally recognize these zones until 1918,⁷ the railroads continued to develop the new system and implemented it on November 18, 1883, a day which came to be known as the day of two noons. As station clocks across the nation reached noon, they were stopped. The station telegraph was connected to an officially designated observatory and, when "standard noon" was reached, the clocks were restarted. The entire nationwide process for this tremendous and far-reaching event took approximately three hours, at the end of which, railroads, acting entirely on their own authority and without any government legislation to back them up, had permanently altered American life.⁸ For the most part, we *do* live our lives by railroad time.

No understanding of stations is complete "without having a sense of how the whole organism functioned."⁹ Symbolically, the typical depot stood as a rather informal town center and the dignity of that office is reflected in the thousands of occurrences of "Railroad Avenue"

⁸ Id.

⁴ Potter, *op. cit.*, p. 15.

⁵ Hill, *op. cit.*

⁶ Id. ⁷ Id.

[°] Ia

⁹ Halberstadt, Hans and April. *The American Train Depot and Roundhouse*, pp. 29-30.

and "Depot Street" nationwide. Functionally, the building emerged in response to the operational needs of nineteenth-century railroading. By tradition, railroads are divided into operational divisions; in the late nineteenth century, a division was roughly 150 miles in length, with each end being a "division point." At these points, locomotives would need to be fueled and fresh crews would replace tired ones. Divisions were further divided into "sections" of anywhere from fifteen to thirty miles each, as this was the maximum practical length of line for which one "section gang" could be responsible.¹⁰ The railroads, then, needed some sort of facilities at the division points to service locomotives, to house crews, and to make up train runs.

The depot and its companion the roundhouse became as sun and moon to railroading, one assuming the role of public spokesman, marketing the railroad's image to the public and stimulating revenue, the other watching over those railroad activities hidden from the public but nevertheless essential to the business. Depot facilities frequently contained numerous supporting structures in addition to the passenger station. Their number and placement varied according to the size and resources of the railroad operating them but included roundhouses, shops, control towers, and yard offices. These buildings were decidedly vernacular in architectural character, reflecting their utilitarian purposes and the "bottom-line" philosophy of railroading, and performed the task of "turning" locomotives and trains. While this term does refer to the physical turning of locomotives on turntables, wyes, or loops,¹¹ it also refers to the process of maintaining them in the roundhouses and shops (Figs. 1.1 and 1.2).¹²

Roundhouses were tricky things to design; they consumed valuable space and had to be planned perfectly in order to function at peak efficiency. There had to be, for instance, enough stalls. They had to be well ventilated. The turntable had to be long enough to accommodate the

¹⁰ Potter, op. cit., p. 27.

¹¹ *Ibid.*, p. 22.

¹² Armstrong, Track Planning for Realistic Operation, p. 45.

locomotives. This latter concern was a continual source of frustration to railroads, who found that their needs for greater power, speed, and performance simply created longer, bulkier, and heavier locomotives. For example, the Delaware and Hudson Railroad discovered that even 105 feet of turntable (at Oneonta, New York) was still not enough to handle its largest locomotives in the 1930s, so crews were forced to split the engine from the tender and move them into the roundhouse one at a time.¹³

It required at least a day to get a cold boiler going (although the fires were put out only for major servicing – otherwise they burned all the time) and about four hours to build up enough steam pressure to move the locomotive out of the house. All the functions associated with locomotive maintenance, from cleaning to building a head of steam, produced toxic fumes, and adequate ventilation was therefore essential. Also, drainage was important, to carry away ash from the pits, for example. Poorly drained turntable pits meant that in winter, snow often had to be dug out before the table would rotate.

In addition to the roundhouse, where the daily tasks of maintenance were performed, there were various job-specific shops, each housing unique tools and personnel. These buildings, or "back shops," were where locomotives could be and often were built completely from scratch (Figs. 1.3 - 1.7). Overhead cranes could lift boilers, chassis, running gear – anything (Fig. 1.8). To allow for the longitudinal movement of the crane, these shops were (and still are) always rectangular.¹⁴ The machine shop housed lathes, forges, and cast replacement parts. Car shops were home to carpenters and upholsterers. There were various administrative offices. Maintenance facilities employed platoons of inspectors, boilermakers, machinists, metal

¹³ Halberstadt, op. cit., pp. 147-148.

¹⁴ Armstrong, op. cit., p. 49.

fabricators, painters, carpenters, blacksmiths, and pipefitters (all craftsmen), as well as wipers, oilers, ash-pit men, and hostlers (unskilled laborers).

Boilermakers performed one of the most essential and dangerous jobs, that of building, repairing, and testing boilers. There are many smaller tubes within the boiler, in order to expose as large a surface area of water as possible to the heat to generate steam. Over time, these tubes can crack, plug, or otherwise fail, sometimes fatally; boiler explosions were fairly common. A common roundhouse task was the monthly cleaning of the boiler, which used long rods and water under high pressure to ream out the tubes. Machinists performed much of the "voodoo" associated with steam railroading. Few people had as much experience with heavy mechanization as they, servicing nearly all the hundreds of interworking metal parts, great and small, from entire wheel assemblies to bearings. Using lathes, they trued the drivers and fabricated bearings, pistons, valves, shafts, cams, and pushrods – to a few thousandths of an inch on components as big as five feet across. Hostlers and witers were the most numerous. Hostlers moved locomotives in and around the shops, fueled and watered them, and operated the turntables and switches. Wipers cleaned the locomotives using wash racks, rags and high-pressure water hoses.

Normal working hours for men on these jobs were ten hours per day, six days a week, although, depending on weather, traffic volume, and so forth, some might have worked seventy-five hours a week or more. Working conditions were hazardous to say the least, and fire was the most cause for concern. Fireproof materials were used in maintenance buildings according to contemporary ideas; brick, masonry, and sheet iron were preferred. It was a dangerous environment. There were heavy machinery parts, open pits of lye, scalding steam, toxic fumes,

poor light, and rough weather.¹⁵ The buildings that housed these activities were built according to function rather than architectural style – that was left to the passenger stations, the public relations buildings of the railroads – but not without ingenuity, craftsmanship, and occasional minimal aesthetic elements (Fig. 1.7).

The depot was also an important innovation in safety and technology. Its telegraph, for example, allowed agents along the entire line to report on the progress and positions of trains (Fig. 1.9).¹⁶ Telegraphy was a skill required of agents, in some instances until the 1980s. "Each station had a two-letter identifier, rather like the three-letter identifier airports have today, and each message to a particular depot began with those two letters." Often, however, the identifier was unnecessary, as each agent had an audibly distinct "hand" when sending Morse code.¹⁷

The telegraph also made the scheduling of trains by timetable much more efficient. Train movements are controlled through orders and signals. In order to adhere to the timetable, each train order permits movement at a specified speed for a specified distance before a new set of orders must be received. The system, modified over time but still in use today, was a precursor to today's air traffic control protocols and could not have functioned without the depot and the Typically, the agent would receive orders for a train, by telegraph, from a central agent. dispatcher. There were three copies of the order – the original for the train crew, a carbon for the dispatcher, and another for the agent's records. The formality of their exchange was an almost martial, but nonetheless important, safety measure.

When an approaching train "hit the bell" – that is, when it tripped a pneumatic sensor, usually about four or five miles away from the station – the agent took any orders he had for it and went out to the platform. For a "nineteen" order, the engineer was signaled to stop, get off

¹⁵ Halberstadt, op. cit., pp. 149-52.

¹⁶ *Ibid.*, pp. 29-30. ¹⁷ *Ibid.*, p. 32.

the train, and sign for receipt of the order personally. For a "thirty-one" order, on the other hand, the agent on the ground would hold it up on a loop of wire, known as a "flimsy." The engineer was signaled to slow the train, and the fireman would lean out and grab the order "on the fly."(Fig. 1.10) Occasionally, of course, the fireman missed, and the train had to stop while he walked back to get it. Once the orders had been delivered, the agent telegraphed "OS" back to the dispatcher, followed by the station, train number, and time. In this way, the dispatcher knew which trains were "on sheet" where and at what time. Not until the advent of a computer-driven Centralized Traffic Control (CTC) system in the 1980s was this system completely supplanted.¹⁸

Over time, station functions became more and more complex. In addition to conducting train movements and promoting the company through ticket sales, depots began to acquire ancillary functions, such as shipping express cargo for Wells Fargo Railway Express Agency (Fig. 1.11) and serving as Western Union agencies.¹⁹ Another major development was in the shipping of mail. By the turn of the century, the U.S. Postal Service had become one of the railroads' largest patrons, fitting rather seamlessly into the overall operations of a given line. Mailbags could be picked up easily "on the fly," in much the same fashion as train orders. A mailbag would be suspended from a large ring on a metal crane that could be swung out from the station platform. A similar arm could be extended from its mounts next to the door of the mail car. It would hook the ring and bag as the train went by; clerks in the car would sort mail for delivery while en route. Railroads were granted annuities by the federal government to haul mail on express trains, which could take priority over all except passenger trains, giving rise to the Railway Post Office, or RPO. The Southern Railway, for example, was awarded \$140,000 in

¹⁸ *Ibid.*, p. 33.

¹⁹ *Ibid.*, p. 31.

1902 to haul mail between Washington and Atlanta and between there and New Orleans.²⁰ "The idea was to move the mail fast; as an incentive, the railroad had to pay cash penalties if the mail was late, one hundred dollars for every thirty minutes' delay."²¹ As a consequence, mail operations, along with railroad work in general, acquired an aura of Romance.

[The] thought of a special train, devoted wholly to written and printed communications of one kind or another, was cherished by the people. The picking up of mail pouches from the stanchions of way stations, while the cars fled past, was dramatic.²²

Railroad work was strenuous and dangerous as well as glamorous, and railroad employees developed their own unique camaraderie and social stature as a result. It is not surprising, therefore, that this was the era that bestowed upon America some of its most famous folk songs and heroes. The "Old 97" of folk fame was famous first for being a crack mail train – at least as famous in its time as the Concorde jet is today and arguably more so: today, the nature of many technological advances keeps them more removed from the masses they serve. So highly specialized, they lack broad understanding or even broad application. To the average citizen, for instance, modern convenience does not directly benefit from advanced space flight. The tangible technology of railroading, however, grew quickly to become widely available to and widely appreciated by multitudes who needed to look no further than their own backyard to witness its power and its potential.

As the nineteenth century came to a close, the station became symbolic of the character of its surroundings. In small towns, it manifested itself as the horizontally oriented, one-sided plan so familiar to our minds. In large cities, it took shape variously as Gothic church or as Neoclassical temple. No matter how great or small, the passenger station was "a symbol of

²⁰ Lyle, Katie Letcher, Scalded To Death By The Steam, p. 15.

²¹ Id.

²² Holbrook, Stewart, *The Story Of American Railroads*, as quoted in Lyle, *op. cit.*, p. 14.

urban wealth, technical development, and cultural sophistication. [It] could say something about a town that a City Hall or a Cathedral could not."²³ Indeed, by the height of passenger travel around the turn of the century, the passenger station was firmly entrenched as the social and cultural *embassy* of its city.

ARCHITECTURAL HISTORY AND DEVELOPMENT

General Characteristics and Standard Designs. Stations were as important a part of travel as the destination itself and stood in stark contrast to the stressful environments found at modern airports. Just what size and style a city would have depended on several factors. First, it depended on the existing city size and its predicted growth. While a substantial depot may have appeared out of proportion with the community in which it was located, its larger size may have been justified by the number of passengers making connecting trains, as was the case of a rather large station built by the Southern Railway at Salisbury, North Carolina (Figs. 1.12 – 1.16). Even taking into account estimated growth, stations frequently became overused, like the interstate highway system today, after ten to twenty years.²⁴

A facility designed in 1850 for projected traffic levels of 1860 would be hopelessly overcrowded by 1870. The newly expanded facility of 1870 was usually cramped, crowded, and wholly inadequate by 1890. By the turn of the century...gargantuan terminals [were] designed to handle as many as eight hundred trains and eighty thousand people daily.²⁵

Overcrowding was probably one factor in the closure of Ware and van Brunt's Victorian masterpiece at Worcester, Massachusetts (below, p. 29). Completed in 1875 and then at the

²³ Halberstadt, op. cit., p. 99.

²⁴ Potter, *op. cit.*, pp. 22-23.

²⁵ Solomon, *op. cit.*, p. 55.

height of fashion, it was obsolete and put out of service by 1911 (only one generation later), when the Boston and Albany Railroad moved across the street to a new Union Station.²⁶

A most interesting feature at many stations during the height of passenger travel was that of station landscaping and gardens (Fig. 1.17). Stations were the proud gateways to a community, and often the citizens, and sometimes the railroads themselves, created gardens adjacent to or surrounding them. Rose gardens, azaleas, shrubbery, goldfish ponds, and ornamental fountains were all popular landscape elements found in station gardens. "In warm climates like California and Florida...courtyards with benches, palm, and banyan trees established open-air gathering spots for passengers."²⁷ Usually, there was no standard in their planning and gardens featured whatever native species were locally desired, although in at least one instance the Union Pacific made an effort at deciduous trees in Wyoming. Sometimes the city itself placed a municipal park next to the station, whether or not there was already a garden on the station grounds. Surprisingly, landscaping was an important and corporate concern of railroads, particularly as they began to embrace commuter traffic in the late nineteenth century. Gardens were most popular at commuter stations in areas around Boston, New York, Philadelphia, and Chicago. The Boston and Albany Railroad, for instance, hired none other than Frederick Law Olmsted to plan the grounds for new stations (designed by H.H. Richardson) on the "Newton Circuit," a commuter line in the wealthier Boston suburbs. Olmsted's station landscape designs included wild roses, bridal wreath, Japanese ivy, and shade trees. In the 1920s, the Reading Railroad kept a gardener on staff and maintained a company hothouse, the flowers from which were arranged to form the corporate logo at its stations. At the time, most

²⁶ Potter, *op. cit.*, p. 16.

²⁷ Potter, *op. cit.*, pp. 22-23.

commuters could easily walk or ride the streetcar to their stations, and there was little need to devote space to vehicle parking.²⁸

Stations ranged in scale from the small "depot" to the grand, even grandiose, "terminal." Small town America was full of vernacular depots, many of which were built to standard designs and often combined all the freight and passenger needs of the community in one building.²⁹ Most railroad companies relied on "stock" blueprints for stations that could be built in the same style in various sizes that, depending on the volume of traffic generated at a particular point, could be tailored to a site. These buildings, in contrast to the large terminals, which were designed by major architectural firms, were usually built by the railroad's own work gangs and often relied on prefabricated, modular parts.³⁰ A look at a Chesapeake and Ohio standard design (Fig. 1.18) and the Hawk's Nest, West Virginia, C & O depot (Fig. 1.19) clearly shows the relationship, particularly in the bargeboard of the gable end. Other examples include Southern Railway plans (Fig. 1.20) for small depots at the Piedmont North Carolina towns of Concord and Hickory (Fig. 1.21).

Aside from decorating the buildings with their corporate logos, in repeating design elements and colors railroads distinguished their depots from those of other companies and also instituted perhaps the earliest known form of architectural "logotyping." The chain restaurants and stores of today have done nothing new. Certainly the community of the building trade also contributed to architectural similarities, whether by referencing *Railway Age*, a contemporary publication, or changing employers, or casually trading information. Freelance architects would surely have used the same basic design regardless of the railroad for which they worked. Depots at Bucyrus, Ohio (Fig. 1.22), on the Ohio Central, and at Fort Payne, Alabama (Fig. 1.23), on the

²⁸ *Ibid.*, pp. 30-31. ²⁹ *Ibid.*, p. 23.

³⁰ *Ibid.*, pp. 11-13.

Alabama Great Southern, show the similarities between buildings built on separate roads and in distinct regions of the country.³¹ With the exception of the West, regional influences were minimal and usually manifested themselves in construction materials. New England depots were given granite treatments, Midwestern ones limestone, and Pennsylvania stations red brick.³²

A terminal, as its name implies, was usually found at the end of the railroad line into a major city (Fig. 1.24). However, "end of the line" is too trivial a description; it would be more appropriate to say that terminal facilities were like the outstretched roots of an enormous tree, delving deep into cities for revenue. Initially, all designs for terminals were, in the European tradition, configured around stub tracks and a "head house," located at the "head" of the tracks. The advantages and disadvantages to this design were well balanced and will be discussed later, but the obvious fact is that stub terminals had to make various arrangements for getting the train turned around.³³

The busiest terminals (Grand Central, for example) processed between 500 and 700 trains every day, employing thousands and handling ten times as many passengers, and functioned generally like cities unto themselves. Some cities and towns were served by multiple railroads, each with its own station. Separately, congestion and expense mounted under so much traffic, and railroads began forming "union terminal" companies toward the middle to end of the nineteenth century. A union terminal company was formed and jointly owned by two or more railroads to construct and operate a station that might serve their entire passenger needs under one roof. Each railroad had its costs reduced and its patronage increased and thus paid use fees based on its share of the business generated at the union station.³⁴ The union terminals also

³¹ *Id.*³² Solomon, *op. cit.*, p. 28.
³³ Potter, *op. cit.*, pp. 21-22.

³⁴ *Ibid.*, p. 39.

established a playing field upon which rival railroads strove to show which of them could provide the safest, swiftest, most comfortable way to get from "here" to "there."³⁵

By the time union stations became popular, stations in general had been part of the urban landscape for over fifty years. In architecture, engineering, and comfort, they were the height to which rail travel had been building since the Baltimore and Ohio's first run to Ellicott's Mills. In them, the traveling public expected to find a variety of services. Although not public buildings in the same sense as a city hall, a church, or a courthouse, they were nevertheless places to which anyone could go at anytime and expect to find coffee shops (open twenty-four hours), restaurants, and stores. At least one elegant, full-service restaurant, including cocktail lounge, was required. Over time, the public also had come to require that first class stations have several waiting rooms for men, women, "colored" passengers, and immigrants. Additional parlors and smoking rooms were highly desirable. There were separate ticket counters for each line served by the station, including local or suburban trains. In most cases, visitors could also make arrangements for visiting local attractions by stopping at the information desk, which functioned in much the same manner as a hotel concierge. Basic services included barbershops, shoeshine stands, newspaper stands (which also sold candy and tobacco), and public telephones. Some stations included infirmaries, customs areas, libraries or reading rooms,³⁶ and YMCAs,³⁷ The supporting areas of these terminals were huge and replete with areas which handled the "head end" of the train – mail, Railway Express items, and baggage, which often had entirely separate

³⁵ Halberstadt, op. cit., p. 50.

³⁶ Halberstadt, op. cit., pp. 106-08.

³⁷ Potter, *op. cit.*, p. 27. The railroad YMCA was a unique and important institution. Some credit Vanderbilt with establishing them at or near stations; most agree that it was an ideal means by which the railroad company could provide train crews with good lodging while on layovers, as well as contribute to the community and the betterment of its employees. A railroad company would subsidize or make significant contributions to the construction of the building, in exchange for which their employees were provided with room and board. The Railroad "Y" is little known, but diverse architectural examples once stood (most are now lost) in railroad towns across the country, including Susquehanna, Pa. (Erie), Hinton, W. Va. (C&O), Spencer, N.C. (Southern), Etowah, Tenn. (L&N), and Richmond, Va. (C&O and Seaboard Air Line).

track and platform arrangements – as well as spaces for janitors closets, walk-in refrigerators, pantries, ice storage, and the linens and laundry facilities necessary to Pullman service.³⁸

Station Origins. Despite the grandeur of its heyday, in every aspect the passenger station had humble beginnings. In the 1830s the only building that came close to performing a similar function was the tollhouse, a creation of the eighteenth century stagecoach system then in use in Britain and America. Baltimore's Mount Clare Station (1830), one of the first built in America, clearly bears a resemblance in appearance to the Bewdley Tollhouse (Thomas Telford, 1801) in Worcestershire, England (Fig. 1.25).³⁹ It also bore a resemblance in function. The tollhouse was essentially a "box office" for the coach, and early passenger stations reflect similar ideas about rail travel. Tickets could be purchased at inns or at the railroad company's office, but the traveler was provided with little or nothing in the way of accommodation. Often there was no train shed or platform and occasionally no building at all. However, it is from the tollhouse that "the most characteristic feature of the nineteenth century station may have evolved: the vast train shed filled with smoke, steam, and the cheerful noise of...bustling engines."40 Some tollhouses, such as one on the Cumberland National Highway (Fig. 1.26), were built with their roofs extended across the road, rather like a porte-cochere, to provide cover for the coach.

Early experimentation in depot design relied on three primary forms, all of them traceable to the tollhouse prototype: domestic, train barn, and temple.⁴¹ The domestic type was vernacular and often resembled an inn, such as the Baltimore and Ohio station at Frederick, Maryland (1831) (Fig. 1.27). The train barn type was exactly what its name implies: a long rectangular

 ³⁸ Halberstadt, *op. cit.*, p. 111.
 ³⁹ Meeks, Carroll L. V. *The Railroad Station*, p. 27.

⁴⁰ Id.

⁴¹ *Ibid.*, pp. 49-50.

building, usually of wood, with doors at either end. It was first and foremost a stable for the iron horse and only secondly a passenger station. As Carroll Meeks points out in The Railroad Station, these simple designs were "entirely adequate to the operating needs of early American railways, since there were only a few trains a day and none at night."42 A good example of this type is that at Syracuse, New York (Daniel Elliot, 1838) (Fig. 1.28). The third type, which was occasionally found in larger and older eastern cities, was modeled after Greek temples. The tracks usually ran under one gallery; an example of this type is the Lowell, Massachusetts, station (Fig. 1.29). There, a single track ran behind the colonnade, occupying about one-third the floor area of the building. The remainder of the space was devoted to platforms or offices not shown in the plans for the station. Although this could show a "separation between architect and engineer,"⁴³ it also shows the importance that buildings of this new type were beginning to gain.

Even though railroads boomed in America during this period, it was some time before they approached European standards of comfort or design. For example, at a time when travelers in Leipzig could come and go in style at First Thüringer Bahnhof (Fig. 1.30), their American counterparts negotiated muddy lanes and had little more than a loading dock to wait on, as shown in a painting by Edward Lampson Henry, "The 9:45 A.M. Accommodation, Stratford, Connecticut" (Fig. 1.31), and in an early photograph of the depot at Wichita, Kansas (Fig. 1.32). However, historians sometimes overlook the fact that having rail service of *any* kind in America was better than having none at all. While the European rail network fit into the existing infrastructures of well-developed and well-established nations, the American one actually *created* the infrastructure of a nation it helped build. In contrast to Britain, for example, where railways were perfectly engineered masterpieces, those in the United States faced challenges

⁴² *Ibid.*, p. 50.
⁴³ *Ibid.*, pp. 27-28.

simply getting the lines built. European capital was invested in accommodation; American money had to go first to track construction, equipment, and so forth. It should be no great surprise that, architecturally, designs in the United States trailed the European models they sought to emulate by approximately fifty years (although that gap had narrowed considerably by the end of the nineteenth century).

Maturation. During the 1850s, as the railroad became less of a novelty and more of an indispensable utility, railroad station architecture began to fit more seamlessly into larger architectural patterns, and the shape of the building began to reflect its use. Popular styles began to follow recognizable trends. "The experimentation of the 1830s and 40s was gradually replaced by slower, more orderly progress."⁴⁴ Emerging types were taking shape in architectural forms which "would be closely integrated with nineteenth century architectural trends as a There is a gradual, chronological trend over the course of the last half of the whole."45 nineteenth century from horizontality to verticality to horizontality again by the twentieth century – what Meeks describes as "a great wave which begins early in the century and sweeps up to a crest, subsiding toward the beginning of the twentieth century."⁴⁶ Specifically, Meeks asserts that nineteenth century depots were representative of an architectural trend which he terms "picturesque eclecticism"⁴⁷ and treats almost as a style unto itself. Whether or not one accepts his taxonomical ideas, station architecture very often does lend itself to the ideals of variety, irregularity, roughness, intricacy, and movement that are essential to the picturesque.

- ⁴⁴ *Ibid.*, p. 55. ⁴⁵ *Ibid.*, p. 55.
- ⁴⁶ *Ibid.*, p. 19.

⁴⁷ *Ibid.*, pp. 2-5.

Indeed, perhaps no other building realizes those elements as well or as easily. As for "variety,"

[f]ew other buildings with a common purpose and similar designs have displayed a greater variety of architectural styles than railroad stations, which varied greatly from railroad to railroad, from community to community, and from region to region.⁴⁸

As for "irregularity," that is found in the plan, which is dependent on the required track arrangement. Track arrangement, in turn, is determined by circumstances such as terrain, street layout, population, and traffic volume (both current and predicted). "Roughness" is accounted for by the scale and utilitarian purpose of the building. These buildings "combined architecture with the churning energy of massive trains"⁴⁹ and were designed "so that a...powerhouse [i.e., a locomotive] could go directly past it, under it, over it, or...through it." The interaction between building and train necessitated unique design considerations.⁵⁰ "Intricacy" was inherent for similar reasons. Designers had to accommodate the needs and whims of the traveler, which reflected the evolving values of American society, as well as those of the locomotive and other railroad equipment. They had to house rough work, dirty men, and heavy machinery along with the upper class and Victorian mores - no easy logistical task. But while the functional requirements often dictated the building's layout and dimensions, they did not dictate its style.⁵¹ "Movement" was an inherent characteristic of these buildings; its manifestation in architectural style rested upon the thousands of people who swept past each other to get into or out of very heavy, moving objects powered by gears, pistons, and steam pressure. How could anyone have looked upon so many varied scenes of bustling activity without feeling greater faith in "civilization" or placing greater stock in "progress?"

⁴⁸ Solomon, *op. cit.*, p. 28.

⁴⁹ Potter, *op. cit.*, p. 19.

⁵⁰ Ibid.

⁵¹ Solomon, *op. cit.*, p. 28.

As America expanded west and demand for rail service increased, stations and rail facilities became increasingly standardized, with special regard at that time for the Italianate style. As with commercial and industrial buildings elsewhere and with other purposes, Italianate designs were "harmonious and functionally expressive."⁵² It was during this time that Henry Holly published the first architectural pattern book to include a depot design. With sentiments apparently similar to those expressed by A.J. Downing, he deemed Italianate styles "appropriate for stations in rural settings, where they set a good architectural example and result in improving the taste of the community."⁵³

Exemplifying those ideas is his "Design 34," (1861) (Fig. 1.33) an Italian villa with steeply pitched roofs and bargeboards similar to that of Victorian and Gothic styles. At least one extant depot, Taunton, Massachusetts, (1865) (Fig. 1.34) seems to be derived from Holly's design and is attributed to him. The first significant example, however, of an American station in a distinctive style was Henry Austin's New Haven Station, (1848-49) (Fig. 1.35) designed after European fashion. It is essentially Italianate with Moorish details.⁵⁴ Another picturesque example is the Troy, New York, Union R.R. Depot (1857) (Fig. 1.36). It is a one-side plan, placed alongside the tracks, but its "picturesque composition is not [traditional]."⁵⁵ The towers are a significant element; their verticality is in contrast to the horizontality of the reverse-curve shed roof, which spans 10 tracks. In this example, there is an even balance of the vertical and horizontal. The station burned and was rebuilt without the towers, but the result was a building with a "denuded... [and] ugly appearance."⁵⁶

- ⁵⁴ *Ibid.*, p. 53.
- ⁵⁵ *Ibid.*, p. 70.

⁵² Meeks, op. cit., p. 46.

⁵³ *Ibid.*, p. 75.

It was about this same time that stations began to develop greater accommodations in the increasingly monumental waiting rooms of urban rail centers. An early example is the Old Colony Railroad station (1847) (Fig. 1.37) at Kneeland Street, Boston, which featured "a lofty gaslit smoking room...a popular barber shop, telegraph office, newsstand, lavatory, bootblack, and check room."⁵⁷ Amenities of this sort became standard by the time the Romanesque Union Station at Providence, Rhode Island (Thomas Tefft, 1848) (Fig. 1.38), which was noted for its "large and comfortable waiting rooms," was built.⁵⁸ Again, designers were looking to Europe for inspiration. Thomas Tefft, the architect, ascribed the stylistic origins of his station to Germany. Here, the increasing trend toward verticality is further evidenced by the graceful towers. Also, larger cities began to see the construction of "union" terminals. These were often "head type" or "stub" configurations. A prominent example is Camden Station in Baltimore (1852-53) (Fig. 1.39), which was, at its completion, the largest depot in the United States. Company offices were housed on a second floor, above "a spacious hall... [and] an early concourse," which opened to waiting rooms and salons.⁵⁹

The Harrisburg, Pennsylvania Union Station (c. 1855) (Fig. 1.40) is perhaps the single best example of what was happening to railroad architecture in larger cities around the time of the Civil War. First, it is Italianate in style, which has been noted as a favorite style for its Second, it is characterized by a tall, square tower, which in color, picturesque aspects. composition, and placement is a sure sign of things to come. Third, it is a union station - that is, it is occupied by two or more companies. Here, they are divided by the tower. Fourth, its size and scale approaches that of the grand terminals that were to characterize the last years of the

⁵⁷ *Ibid.*, p. 51. ⁵⁸ *Ibid.*, p. 69.

⁵⁹ *Ibid.*, p. 71.

century. Overall, it contains many of the elements that would "set a fashion" for depot design in the years following the Civil War.⁶⁰

The period 1860-1890 witnessed advancements in railroad technology, particularly in the areas of luxury, safety, and speed. Pullman sleepers were inaugurated as early as 1872, and by 1879 dining cars alleviated the need for trains to stop at a station for the passengers to eat. Invented in 1869, George Westinghouse's air brake soon became a standard feature. Also, electricity began to be implemented in stations. ⁶¹ During this time, "no completely new type of station was developed; instead, a parallel process of modification and improvement of old types occurred."⁶² Notably, concourses emerged to handle general traffic and to maintain quieter, more private waiting rooms. Also, tunnels connecting platforms allowed pedestrian traffic to safely cross any number of tracks between them.⁶³

In America, large "head" type stations began to dominate in cities with adequate demand. Towers characterize quite a number of those built during the period after the Civil War and occur on stations of varying architectural styles, including Italianate, Richardsonian, and Gothic. These towers, usually placed asymmetrically, were contrapuntal to the long, low profile of the shed and terminal⁶⁴ and were the chief means of expressing or attaining the picturesque requirements of "variety, irregularity, roughness, intricacy, and movement." They also fit the general pattern of evolution in depot design – from horizontality to verticality and back again.

It was also at this time that "some curious features appeared in the United States."⁶⁵ American society was becoming more rigidly cast, and public spaces, while dominant, began to

⁶⁰ *Ibid.*, p. 73.

⁶¹ *Ibid.*, pp. 77-78.

⁶² *Ibid.*, p. 78.

⁶³ *Ibid.*, p. 79.

⁶⁴ Potter, op. cit., pp. 15-16.

⁶⁵ Meeks, *op. cit.*, p. 82.

be further subdivided and compartmentalized into private or segregated ones, particularly for women and blacks. It was about this time that the U.S. Supreme Court ruled, in Plessy v. *Ferguson* (not surprisingly, a case involving segregated railroad facilities and cars), that racial segregation was allowable if the separate facilities provided were equal, a doctrine that was to persist until the 1950s and was not limited to southern stations. Typically, this meant that blacks were required to use separate toilets, drinking fountains, and ticket windows. Immigrants were similarly segregated, although separating them did help handle the language problem and also kept them from getting swindled by the ubiquitous "hangers on" found at large stations.⁶⁶ Women, too, were kept away from the main lobby; however, their removal from the public areas was less forced and free of stigma. It was widely accepted by both men and women that a "lady" with any self-respect would want to retire to the rockers and ottomans of a separate space (Fig. 1.41), away from the unwashed press of "smoking, spitting, and swearing"⁶⁷ humanity gathered in the main waiting room. One station, Detroit, even introduced "a separate ladies' entrance, on a side street with its own marguee.⁶⁸ This became common practice, similar to that of hotels, which frequently operated in close conjunction with the railroads – so close, in fact, that many railroads simply owned or leased space to hotels adjacent to or part of their terminals. Crew facilities, too, were segregated from the public. There were other architectural developments as well, including verandas and carriage courts. None, however, was as significant as the developments of the tower and the train shed.

Again, the inspiration came from Europe, especially Britain. What started "in the 1860s with the shed at St. Pancras Station climax[ed]...in the 1890s with the 300-foot span of the

⁶⁶ Potter, *op. cit.*, p. 25.

⁶⁷ *Ibid.*, p. 23-24.

⁶⁸ Meeks, op. cit., p. 82.

Broad Street Station in Philadelphia."⁶⁹ St. Pancras station (Fig. 1.43) in London inspired many American stations⁷⁰ of the Victorian Gothic period, the earliest being Park Square Station (Boston, 1872) (Fig. 1.42). It was a one level "head station," meaning it operated on a stub-track configuration. In "design, materials, and finish"⁷¹ it was remarkably similar to Memorial Hall at nearby Cambridge. The main waiting room had a high ceiling and was lit by rose windows and gaslights. It also featured improvements in comfort and amenities not previously found in most passenger stations, among them "a reading room and a billiard room."⁷² The dominant exterior feature was, of course, the tower. It, along with the station's polychromatic scheme, was well suited to Victorian sensibilities. Park Square Station was famous for its "gentle English Gothic exterior, its finely proportioned clock tower, [and] its graceful facade..."⁷³ Such stations were the height of fashion at the time. Another excellent example is the Worcester, Massachusetts station (Figs. 1.44 - 1.46) by Ware and Van Brunt (1875-77), also typical of its style. Its tower rises a full 212 feet high – 160 feet of which is shaft. The "rage" for towered Gothic stations similar to these appeared throughout the country during this time and afforded station designs their chief element of verticality.⁷⁴

In the English-speaking world the...tower rose [fearlessly] from every building of importance, including stations, in response to contemporary fashion... America was second only to England in her enthusiasm for them...⁷⁵

Indeed, "verticality" has associations elsewhere in American culture. Towered stations are contemporary with tall beaver hats, for instance; the haberdashery of the twentieth century concourse, on the other hand, would more likely offer bowlers or fedoras. Artistically, they were

⁶⁹ *Ibid.*, p. 83.

⁷⁰ *Ibid.*, pp. 51-52.

⁷¹ *Ibid.*, p. 101.

⁷² Id.

 ⁷³ Kilham, *Boston after Bulfinch*, p. 76; quoted in Meeks, *op. cit.*, p. 102. Please note: no other bibliographical information for this source is available, as Meeks does not provide a complete bibliography of his sources.
 ⁷⁴ Meeks, *op. cit.*, p. 103.

 $^{75 \}mu \cdot i$ 0.6

⁷⁵ *Ibid.*, p. 94.

an essential element of the picturesque; Waverly Novels had imbued them with Romantic qualities. They were inspired by prototypes from every corner of history, but there was a great deal of affinity for one shape in particular, that first used at Scarisbrick Hall in Lancashire (1837) and again in larger scale on the ultimate symbol of the Victorian period – Big Ben at Westminster.⁷⁶ That composition, with its belfry and steeply pitched roof reoccurs throughout American railroad stations. The Victorians prized the bold and striking above moderation or understatement.⁷⁷

The train shed is by many accounts traceable to London's famous Crystal Palace, built in 1850. Also traceable to early train barns, it was a roofed outdoor area, a tall span that provided cover for embarking and disembarking passengers. Monitors in the roof allowed smoke and steam from the locomotives to be ventilated away from the passenger area and the head house. Sheds were also the product of improved ironworking and were arguably the most significant nineteenth century innovation of station design, uniting beauty and function seamlessly.⁷⁸ The use of cast iron allowed wider and wider platform areas to be spanned by a single shed roof,⁷⁹ a condition that drove an informal yet robust competition between engineering minds to design the widest such structure possible. Sheds were utilized in the United States from the 1860s until shortly after the turn of the century; many sources cite Cornelius Vanderbilt's Grand Central Station as the first great American station and the first to employ a shed. Had it not been for the desire to see an even larger one built, they might not have occupied the landscape as long as they did; they were expensive to construct and "nightmare[s] to maintain."⁸⁰ Neither the height of the roof nor its louvered vents did much to eliminate the toxic and corrosive smoke exhaust, which

⁷⁶ Ibid., p. 95.

⁷⁷ *Ibid.*, p. 102.

⁷⁸ *Ibid.*, p. 51.

⁷⁹ Potter, *op. cit.*, pp. 34-35.

⁸⁰ Id.

weakened the iron structure and sullied the glass. Further, the climate of the shed ranged from frigid to stifling, and it was nearly always dark from the smoke.

The first serious threat to the "long-span" shed was, ironically, a new type of shed. Patented by civil engineer Lincoln Bush and dubbed the "Bush shed," (Fig. 1.47) the first instance of its use was in 1906 at the Delaware, Lackawanna and Western's railroad and ferry terminal in Hoboken, New Jersey. Bush sheds were cantilevered, modular constructions of steel that spanned two adjacent tracks and half of the platform to either side. Built of steel rather than cast iron to withstand exposure to the effects of steam, Bush sheds were lower than their counterparts – about sixteen feet from the top of the rail – and slotted longitudinally, directly above the centerline of the track, to ventilate better the smoke of locomotives. Most importantly, their construction costs were one-half that of conventional sheds.⁸¹ "By 1914, Bush sheds had been installed in twelve stations, some...at new facilities like Pennsylvania Station in Baltimore."82

Although a dramatic improvement, even the Bush shed was short-lived; most examples were constructed during a period of about twelve years. At many stations, the Bush shed was quickly replaced by the familiar, more cost-effective, freestanding "butterfly" type platform shed. The real demise of sheds, though, came about with the innovative construction of both Pennsylvania Station and Grand Central Terminal in New York City. At each of these stations, trains arrived completely underground, alleviating the need for any shed structure at all. Also, those two buildings, discussed in detail below, were built in the twilight of great passenger

⁸¹ *Ibid.*, p. 36. ⁸² *Id*.
station construction; dwindling passenger revenues and loss of service in the years that followed resulted in a loss of demand for such structures at American passenger stations.⁸³

Concomitant to the architectural developments of tower and shed, however, was the weird juxtaposition of frontier settlement with the Victorian ideology of established eastern cities. While Ware and Van Brunt erected their monument to civilization at Worcester during the years 1875 to 1877, manifest destiny and the U.S. cavalry were trounced at Little Big Horn, Montana (1876) and the James Brothers robbed trains in Missouri. "In 1873, the [Santa Fe] depot at Dodge City was turned into a citadel in a battle between the mayor and the populace over the closing of the red-light district."⁸⁴ America could no longer define itself strictly according to eastern attitudes, and the national architecture would reflect the country's struggle to reconcile these two regions by the time the World's Columbian Exposition was held, in the more western city of Chicago, in 1893.

The use of towers and sheds peaked in Philadelphia's Broad Street Station (built 1881 – ?) (Fig. 1.48), by Joseph Wilson and Arthur Truscott. Trains approached the building on a raised viaduct known as the "Chinese Wall," thus providing the building with its two-level configuration. A portion of the ground floor served as a carriageway. Twin sheds were eventually replaced by a single 300-foot span about 1893, when the whole building received additions under the direction of Frank Furness and Allan Evans. This was the largest single-span shed ever constructed anywhere in the world. The roof was supported by square columns with mannerist flat-bracketed capitals. In contrast to the vaulted shed, the ceilings of the dramatically open interior were flat.⁸⁵ Open stairs and elevators between floors heightened the effect, "their

⁸³ Id.

⁸⁴ Meeks, *op. cit.*, p. 100.

⁸⁵ *Ibid.*, p. 104.

dignified up-and-downness complementing the in-and-out movement of the nearby trains."86 The station is unique, however, in that its exterior eschews the contemporary "train station" look for one more commercial or more business-like. "It was too early for a flat slab treatment, but movement and intricacy were beginning to congeal."⁸⁷ The tower is shorter and stouter rather than thin and elongated. Broad Street Station thus reflects a waning of the mood of which Park Square and Worcester are emblematic.

As Meeks points out, by this time the "wave of nineteenth century form was beginning its descent...³⁸ What had begun, in other words, with classical, round-arched Italianate designs had risen to a crest in the spiky, "uncomfortable-to-sit-on" spires of the Gothic, and was now subsiding into round arches and classical elements once again. Towers were not abandoned overnight, however. Rather, they dwindled and were gradually absorbed by the main block of the building, as in the case of Broad Street Station, where the tower is hardly articulated from the main mass. Further evidence of this "downward" trend is visible in F.H. Kimball's design for the Reading Railroad (c. 1885?) (Fig. 1.49) – completed about the same time as and just a few blocks from Broad Street Station – which has no towers at all. The transition was accomplished in the details: from bold and striking to fewer, more substantial and calmer.⁸⁹

One major source of change was H.H. Richardson, whose designs were decidedly more subdued than the High Victorian ones they supplanted. By 1885, the American Institute of Architects listed among its ten best American buildings no fewer than five by Richardson (first, Trinity Church, Boston; seventh, Albany City Hall; eighth, Sever Hall, Cambridge; ninth, the

⁸⁶ *Id.* ⁸⁷ *Id.* ⁸⁸ *Ibid.*, p. 105.

⁸⁹ Id.

New York State Capitol; and tenth, his own town hall at North Easton, Massachusetts).⁹⁰ Even admitting some bias on the part of the AIA would not discredit Richardson's popularity, as time has shown. His New London, Connecticut Union Station (1885-87) (Fig. 1.50) represents a dramatic change from the Park Square and Worcester Station designs of less than twenty years before. It is the largest station Richardson designed and appears even more massive because of its battered first floor and slight second floor overhang.

Even a small depot, such as that at North Easton (1886) (Fig. 1.51), appears squat and heavy, dominated by its roof and his distinctive voussoirs. Stations often have been characterized as the churches of their day, and Richardson's were mighty fortresses indeed. Meeks, in fact, characterizes their interiors as places of "dense gloom."⁹¹ Railroads may have lamented their cost and critics their arguably oppressive interiors, but the public was nevertheless impressed. More properly called "Romanesque Revival," buildings in the Richardsonian vein featured shorter, squat columns and towers, heavy, rough-cut stone walls, round arches, and more deeply recessed windows. Stations in the style continued to be constructed for several years after H.H. Richardson's death; notable examples include stations in Montreal (Bruce Price, 1888), Toronto (Strickland and Symonds, 1892-94), and especially St. Louis (Theodore C. Link, 1891-94) (Fig. 1.52), which was marked by its Grand Hall (Fig. 1.53). The space was roofed under an enormous barrel vault which, despite its cavernous dimensions, created a sense of awe without overwhelming the travelers passing through it.⁹²

⁹⁰ *Ibid.*, p. 104. ⁹¹ *Ibid.*, p. 107.

"Imperial Splendor."⁹³ In addition to being representative of the Richardsonian style as applied to passenger stations. St. Louis is significant because it is evidence of a growing trend toward aesthetic achievement through sheer size. The years 1890 to 1930 would see stations built to larger sizes than ever before imagined, and "grand" is the word to describe them. Continued advances in safety, luxury, and speed made titanic proportion and opulence possible. Similarly, there were no unprecedented or complex problems to solve; station planning, like every other aspect of railroading in the age of steam, began to reflect more refinement (e.g., increasing the number of track levels) and less innovation. Again, the evolution of architectural trends paralleled other cultural developments. Stations grew larger and grander, as did empires and ocean liners. The United States closed the western frontier and entered the club of Imperial nations after military victories in the Philippines and Cuba. The virile towers of Manifest Destiny disappeared and were replaced by the refined domes and arches of the empire builders.⁹⁴

Although intended to emulate St. Pancras Station, New York's First Grand Central (Isaac C. Buckhout and John B. Snook, 1869-71) (Figs. 1.54 and 1.55) is curious because it also may be seen as a very early example of the turn-of-the-century trend toward megalomania. A union station which required passengers to exit the building and then re-enter in order to make transfers between railroads, it was still the "showplace of Cornelius Vanderbilt's New York Central empire"⁹⁵ – the New York Central & Hudson River Railroad, the New York & Harlem Railroad, and the New York & New Haven Railroad – and it embodied the ostentatious character of its owner. Built in the Empire State, in the age of financial empires, the first Grand Central Terminal was an Empire style monument to a railroad empire and its emperor. With its

⁹³ *ibid.*, p. 125.
⁹⁴ *Ibid.*, pp. 109-110.

⁹⁵ Potter, op. cit., p. 35.

construction, "the Age of the Grand Terminal had begun."⁹⁶ New York City (which had displaced Philadelphia as the seat of economic power), the Vanderbilt name, and the New York Central Railroad and its station are virtually synonymous with the spirit of the age that gave rise to the giant stations that were to come. Like the first union station at Worcester, Massachusetts, the first Grand Central Terminal became obsolete within thirty years; but its legacy, the second Grand Central Terminal, would have similar associations in the American mind.

The last decade of the nineteenth century witnessed a dramatic change in the station's public image, in large part because of the success of the 1893 World's Columbian Exposition held in Chicago. As opposed to the staid eastern cities of Philadelphia, Boston, or New York, Chicago was a "new" city, and the fair it hosted would mark a turning point in American architecture as a whole – the emergence of the "City Beautiful" movement.⁹⁷ Seeking to improve conditions in America's cities, the advocates of the "City Beautiful" had a strong influence on station design. Ideas of how a station "ought" to look began to reflect similar ideas about public buildings like post offices and courthouses.⁹⁸ Although representative of a new direction, the architectural themes of the period were not in themselves new; architecture returned to the classical in the arched and domed designs that came out of the Ecole des Beaux Arts, and large stations were no exception. Between 1893 and 1930, cities across the country constructed terminals with a propensity for the extremely large "monumental public building."⁹⁹

The busiest stations in the world and the largest in history were built at this time.¹⁰⁰ These gigantic buildings were usually characterized by a vast concourse, which by the early twentieth century had replaced the tower as the trademark feature of station design. To this

⁹⁶ Halberstadt, op. cit., p. 100.

⁹⁷ Meeks, op. cit., p. 126.

⁹⁸ Potter, *op. cit.*, p. 18.

⁹⁹ Meeks, op. cit., p. 125.

¹⁰⁰ *Ibid.*, p. 110.

feature were often added large-scale Beaux-Arts Classical elements such as domes, colonnades, and especially arches. The arch was symbolic as a portal, and it appropriately expressed the daily ebb and flow of humanity into and out of these spaces.¹⁰¹ Of new stations constructed at this time, even small ones, such as the Piedmont and Northern Railway's passenger station at Anderson, South Carolina (c. 1911) (Fig. 1.56), were sometimes given neoclassical details. The P&N station featured an arched entrance, which was very large for so small a building, that expressed the idea of a "gateway" in and out of the city.

Clearly, architects of the period believed that the "colossal" had as much aesthetic appeal as the "picturesque." New stations were built as tall as seventy feet to the cornice, their façades running a thousand feet or more, with correspondingly large concourses.

Architects and corporations, influenced by the ideal of the City Beautiful, wished to contribute splendid, monumental structures to the urban scene... [They] accepted as valid the classic conception that public buildings should be supremely impressive. They adopted the classic means: fine materials, uniform color, colossal scale, and a comparatively narrow range of form. They gave long and careful thought to the refinement and perfection of the design and eschewed self-expression.¹⁰²

Such scale determined, however, that passengers often had to walk as far as a thousand feet through marble wildernesses to reach their trains.¹⁰³ Indeed, the primary challenges facing these designs were logistical in nature. The only prototypical buildings serving as many people at once, cathedrals and theaters, were of little help – for they had leisurely inward and outward flows at given times.¹⁰⁴ In passenger terminals, however, people were arriving and departing constantly and were of two distinct types: the commuter and the long-distance traveler.

¹⁰³ *Ibid.*, p. 110.

¹⁰¹ *Ibid.*, p. 133.

^{1010.00,} r 102 Id.

¹⁰⁴ *Ibid.*, p. 92.

Travel by rail dramatically affected the growth of cities by simply changing the way people moved about in their daily lives. Commuting became a late nineteenth and early twentieth century railroad phenomenon. Although reluctant at first, railroads eventually found commuter traffic highly profitable, because it helped develop real estate adjacent to the right of way. Railroads began planning and marketing commuter routes and thus were instrumental in creating the suburban landscape. Commuters are so called, in fact, because it was standard policy for railroads "to reduce, or commute, their normal travel fares for frequent daily travelers..."¹⁰⁵

Commuters are ideal because their needs are simple. They desire swift, safe, and economical transit. They often buy tickets in advance and usually ride the same train. They carry almost no luggage. They do, however, wish to arrive at and depart from the same terminal at the same time, creating congestion. The facilities of the station, then, must be able to handle a capacity crowd – but only for about two hours twice a day. The needs of distance travelers, on the other hand, are more complex and include waiting rooms, baggage porters, ticket windows, and lunch counters. Distance trains reflect similar needs in their equipment, utilizing not just coaches but sleepers and diners¹⁰⁶ in a hierarchical order. Coaches and Pullmans must be separated to divide classes of travelers. Mail and baggage must be grouped together (traditionally at the front of the train) to allow circulation of the passengers and crew. Dining cars must be located somewhere near the middle so that nobody has to walk the length of the When present, observation cars necessarily must be located at the rear.¹⁰⁷ train to eat. Commuters often travel alone and know their schedules by heart; distance travelers are more likely to travel in groups and may be easily disoriented in a large terminal.

¹⁰⁵ Solomon, *op. cit.*, p. 58.

¹⁰⁶ Id.

¹⁰⁷ Armstrong, *op. cit.*, p. 44.

The commuter will march into the station two minutes before departure, while the long-distance passenger will arrive two hours early. Commuters mainly want to travel inbound in the morning and outbound in the afternoon, but long-distance travelers come and go in all directions at all hours.¹⁰⁸

There were two main refinements to the configuration of the large terminal in order to handle these logistical issues better. The first was in increasing the number of track levels. The advantages of this measure were that trains could be better coordinated and that passengers had Another refinement was the decreased use of stub track reduced distances to walk. configurations in favor of through track designs. The latter could accommodate three trains per hour; the former two. Stub or "head type" terminals are not without their advantages. When, for instance, the city in which the terminal is located is the destination for most travelers (as opposed to those who are simply making a connection), the head type station can be more economical. With real estate in highly developed urban areas at a premium and with the increasing size of passenger stations requiring larger and larger parcels of land, the stub track design is obviously advantageous. Also, platforms are more accessible from a head house, which alleviates the need for crossing tracks laterally. Lastly, it should be noted that track configurations were more often a "given" than a "druther" and depended on pre-existing factors such as streets.¹⁰⁹ Major changes in street layouts, while possible, "were not without limitations and occurred at tremendous expense."¹¹⁰

From an operations point of view, however, through track plans are preferable. While the throat of trackwork must be duplicated, it operates faster. The efficiency of through track plans begins in the station's throat and accommodates a simpler interlocking system, which prevents

¹⁰⁸ Solomon, *op. cit.*, p. 58.

¹⁰⁹ Potter, *op. cit.*, p. 22.

¹¹⁰ Id.

switches from lining trains into each other.¹¹¹ It also allows for parallel routing to and from any track. Consequently, although rare in the United States before the turn of the century, through track station configurations grew in popularity as rail systems became more complex in the twentieth century.¹¹² The considerable expense of complex trackwork was tolerated by the railroads because, in the overall arrangement, it saved them more room in the throats of their station approaches. "The use of more expensive special trackwork becomes proportionally more important in keeping the overall length of the throat within bounds."¹¹³

It is perhaps serendipitous, and certainly ironic, that after World War II the through track configuration - implemented to handle heavier traffic flow - was also best suited to waning passenger traffic. It permitted the same operational procedures in large cities and small towns alike, tracks could be removed with little alteration in the overall scheme, and it required a minimum of supporting buildings. To cost-cutting railroad minds of the 1950s and 60s, it did more to bring the people to the train, rather than taking the train to the people.

Battle of the "Grands." Two of the best designs ever to handle the complexities of station operation were those of New York's Pennsylvania Station (completed 1910-11, Pennsylvania Railroad) and the second Grand Central Terminal (1903-12, New York Central Railroad). The public had not before enjoyed such splendid travel and never would again.¹¹⁴ The construction of these two terminals marked the high tide of railroading's glory days, and they were the ultimate symbols of the historic rivalry between their two companies.

¹¹¹ *Ibid.*, p. 33. ¹¹² Solomon, *op. cit.*, pp. 57-58.

¹¹³ Armstrong, op. cit., p. 17.

¹¹⁴ Halberstadt, op. cit., p. 100.

In the first corner, representing the fine traditions of both Philadelphia – the "Venice of the West," long the seat of American art, science, and finance – and of the Pennsylvania Railroad, the largest in the world and the standard by which all other U.S. lines were measured: Pennsylvania Station (Figs. 1.57 – 1.62). The late terminal was the vision of the railroad president, Alexander Cassat, and he intended it to show that art and engineering were complementary. The terminal would rise calmly and sedately in the midst of the noisy city, while the trains themselves would be hidden underground in large tunnels. Cassat's sister was Impressionist painter Mary Cassat, and he was himself a man of refined artistic tastes. He was much taken with the Roman baths of Caracalla and the temple of Diocletian and so hired architect Charles McKim, who was trained by the Ecole de Beaux Arts and also impressed by the baths, to realize his ambitious plans for bringing the Pennsy into New York City.¹¹⁵

Before the turn of the century, the Pennsylvania Railroad was thwarted in getting directly into the nation's largest city by the Hudson River. Instead, its passengers were ferried across, while the New York Central's *did* have a direct connection. Cassat became president of the Pennsy in 1899 and immediately sought to change the situation. On a visit to his sister Mary in 1901, Cassat witnessed clean, quiet electric locomotives working trains into and out of the new Gare d'Orsay in Paris. The use of electricity allowed the trains to reach the terminal through underground tunnels, and Cassat was impressed. The Paris station served as a prototype of the engineering that would allow his trains to reach Manhattan. Furthermore, the new station would not be a stub-end terminal, but a through station, dwarfing any yet built, that would connect New Jersey, Manhattan, Long Island, and the Bronx by a series of tunnels and bridges.¹¹⁶

¹¹⁵ *Ibid.*, p. 101.

¹¹⁶ Solomon, *op. cit.*, p. 99.

McKim's station was one of the most outstanding ever built. He used travertine marble in the waiting room, as had the Romans at the baths of Caracalla, and Corinthian columns over sixty feet tall supported a vaulted ceiling a dizzying 150 feet from the floor.¹¹⁷ The façade which faced Seventh Avenue featured an almost uncountable number¹¹⁸ of Doric columns in pink marble from Milford, Massachusetts.¹¹⁹ The concourse was influenced by the temple of Diocletian and featured a glass and steel roof supported by steel columns after the manner of the famed Crystal Palace in London. The columns and arches of this space reflected the engineering they housed in the exposed, almost skeletal, members which also resembled the disappeared train sheds of thirty years before.

For ornament, Cassat commissioned famed sculptor Adolph Weinman to adorn the waiting room. Weinman designed eagles, the imperial insignia of Rome (and the United States¹²⁰), and maiden figures representing day and night. The plan was a lovely design in the Ecole tradition that was carefully crafted to suit its function (which was to allow the smooth flow of pedestrian traffic along its axes) as well as to stand as one of the most beautiful places ever conceived. Nearly a decade in the planning and after five years of excavating, boring, and pouring concrete, the station was opened in 1911 and hailed as "the handsomest train station in the world, a monument to the Pennsylvania Railroad, and a gift to the city of New York."¹²¹

And in the opposite corner, representing the "new money" of the Vanderbilt empire, the second largest railroad in America, and the largest city in the country is the second Grand Central Station (Figs. 1.63 - 1.66). Second Grand Central was the result of a limited design competition and the masterpiece of the firm of Reed and Stem, who had lasting reputations as

¹¹⁷ *Id*.

¹¹⁸ Meeks, *op. cit.*, p. 131.

¹¹⁹ Solomon, *op. cit.*, p. 101.

¹²⁰ The "imperial" aspects of U.S. society at this time period are significant and have been noted above.

¹²¹ Solomon, *op. cit.*, p. 101.

station architects. Assisting them in the execution, though, was the firm of Warren and Wetmore. Precisely why this arrangement was chosen is unclear,¹²² but Charles Reed was the brother-in-law of the railroad's chief civil engineer, William J. Wilgus.¹²³ It was Wilgus who proposed an underground approach for the tracks and development of the "air rights" above into an additional source of income.¹²⁴ At any rate, the building has long been acknowledged a fine example of "clarity, directness, and simplicity....^{"125} The head house contains some of the most elegant features ever found in a passenger station.

Grand Central was and still is one of the most successful of American railroad stations, operationally as well as aesthetically. It was, and still is, larger than many small American towns. Designed to accommodate 110,000 passengers a day, it turned approximately 600 trains daily on sixty-seven electrified tracks¹²⁶ arranged on multiple levels,¹²⁷ with each level equipped with loop trackage to speed the reversing process. The firms sought to minimize congestion. Distance trains at Grand Central relied mainly on forty-one upper-level tracks, while suburban runs used twenty-six tracks on the lower, each level with its own concourse to maximize efficiency. An additional lower-level concourse was built in anticipation of increased traffic but has never been opened. It serves instead as a maintenance and storage yard.¹²⁸

Greeting passengers on Forty-second Street was a 1,500-ton Indiana limestone statue of a trio of figures: Mercury in the center, to represent travel (some say "commerce" instead), flanked by Hercules and Minerva, representing physical and mental energy. The three surrounded a clock thirteen feet in diameter; Mercury's outstretched arms welcoming all who

¹²⁸ Id.

¹²² Meeks, op. cit., p. 130.

¹²³ Potter, *op. cit.*, p. 175.

¹²⁴ Trains Unlimited, "Grand Central." The History Channel, 1997 (DVD).

¹²⁵ Meeks, *op. cit.*, p. 130.

¹²⁶ Estimates vary; Solomon for instance places the number at 103 (p. 11).

¹²⁷ Meeks, op. cit., p. 110.

would experience the New York Central's famous red carpet treatment. Ramps moved passengers to and from the platforms and also connected to all adjacent streets and nearby subways.¹²⁹ The underground electric track system, designed by Wilgus, allowed cross streets from Forty-fifth to Fifty-fifth to be reconnected.¹³⁰ Reed further designed a "circumferential plaza"¹³¹ which allowed Park Avenue to wrap around the building. Warren and Wetmore were responsible for the Beaux Arts granite and limestone façade. The waiting room featured Botticino marble wainscoting and the main concourse was floored with Tennessee marble. Above the famous clock, the vaulted ceiling was painted by artist Paul Helleu with over two thousand stars, showing the constellations – outlined with gold and illuminated from behind – as they appear in the northern hemisphere between October and March.¹³²

Collapse. The grand terminals of New York City were monumental achievements of engineering and architecture, in magnitude unequalled in history. Yet, as glorious as the colossal terminals were, they were extremely costly to operate. Increasingly, designs for them became the products of what Meeks termed "functionalism,"¹³³ and reflected the technological society that evolved during World War II. Stations began to be planned according to mind-numbing statistical data, such as per-foot-per-minute rate of discharge from platforms.¹³⁴ Only a few more great stations would be built, including Chicago's Union Station (1914-25) (Fig. 1.67), among the last to be built in Beaux-Arts classical style. It was designed by D.H. Burnham, who had also designed the very successful Beaux-Arts Washington, D.C., Union Station (1906) (Fig. 1.68).

¹²⁹ *Ibid.*, p. 111.

¹³⁰ Potter, op. cit., p. 175.

¹³¹ *Id*.

¹³² The mural was criticized by some because the sky had to be somewhat "rearranged" to fit the ceiling.

¹³³ Meeks, op. cit., p. 143.

¹³⁴ *Ibid.*, p. 145.

Chicago Union was served by three railroads: the Pennsylvania, the Burlington, and the Milwaukee Road. In configuration, it was composed of two back-to-back stub-end terminals joined by a pair of run-through tracks. Like Grand Central and Penn Station, which it resembled with its Indiana limestone façade and long rows of Tuscan columns, it was divided into main waiting room and concourse. A raised driveway and ramp system brought traffic to the station and speeded the pickup of passengers.¹³⁵

Another of the last great terminals to be built, and one of the most expensive, was Cincinnati's lovely Union Terminal (Alfred Fellheimer and Steward Wagner, 1929-33) (Figs. 1.69 - 1.74) represents a significant change in architecture and was perhaps the most unique of all terminals built on such a scale. The building was planned as the consolidating solution to the needs of no fewer than seven railroads: the Baltimore and Ohio, the Ohio State Limited, the Pennsylvania, the Chesapeake and Ohio, the Louisville and Nashville, the Southern, and the Norfolk and Western. Cincinnati Union was the last great union terminal to be built in the United States, and its opening, at a cost of \$41 million, single-handedly closed five other stations. It was "supposed to handle 216 trains a day."¹³⁶ However, passenger travel had been in steady decline for nearly ten years, and the building, located on almost three hundred acres¹³⁷ "far out from the urban center,"¹³⁸ (according to Meeks) was never fully utilized, except during World War II.¹³⁹ Ironically, the building is characterized by the meticulous attention given to circulation and vehicle traffic in its design. The arched, marble-and-limestone Art Deco entrance, two hundred feet in diameter, rather resembles a half funnel facing east: gathering in travelers and channeling them westward out onto platforms - not a bad thing for a mid-western

¹³⁵ Solomon, *op. cit.*, pp. 43-45.

¹³⁶ Halberstadt, *op. cit.*, pp. 111-112.

¹³⁷ Potter, op. cit., p. 386.

¹³⁸ Meeks, op. cit., p. 157.

¹³⁹ Potter, op. cit., p. 388.

43

city like Cincinnati to do. Vehicle ramps led down to the lower level, where buses and taxis could make stops and then continue on a loop back up to the plaza.¹⁴⁰ This was "the most elaborate provision for vehicular traffic in any modern station."¹⁴¹

Carroll Meeks, who was perhaps too contemporary to the building's construction, failed to recognize its aesthetic qualities, claiming it suffered from a "lack of…major architectural direction."¹⁴² The problem with Meeks' claim, however, is that it requires the word "direction" be defined by straight lines. Inside and out, from the reflecting pool to the leather settees of the concourse, Cincinnati Union was characterized by curves. Nearly everything was round. Inside the arched entrance, radiating around an enormous rotunda, were the necessary ticket counters and offices, a dress boutique, a tailor, a toy store, a bookshop, a travel bureau, a lunchroom, and a one hundred-seat newsreel screening room, all of them directly accessible from the circular floor of the rotunda. Encircling the walls of the rotunda were two murals by the artist Winold Reiss, each 105 feet long by twenty-five feet high, which depicted the history of America and of Cincinnati in particular. Other decorative materials included Rockwood Pottery tiles, chrome, aluminum, carved linoleum, and South American woods.¹⁴³

In terms of the building's "flow," Cincinnati Union's design was a stark contrast to the grand linear dignity of Pennsylvania Station, Grand Central Terminal, Washington, D.C. Union Station, and others, which ushered travelers to and fro in procession. Cincinnati Union is characterized by its pattern of "circulation." By the 1920s, though, several factors had emerged which would precipitate the literal downfall of America's passenger stations and would forever change the nature of railroading in general. Chiefly responsible was the convenience of the

¹⁴⁰ Meeks, op. cit., p. 157.

 $^{^{141}}$ *Id*.

¹⁴² *Ibid.*, p. 158.

¹⁴³ Potter, op. cit., pp. 387-88.

automobile, in conjunction with a rapidly improving national highway system. Suddenly, middle-class America could travel wherever and whenever it wanted without the hassle of being jostled about on a train operating on a strict schedule. There was no need to check baggage, make a connection, or follow any schedule except one's own. Writing in the Southern Railway's annual report of October, 1915, Fairfax Harrison, the road's president, noted that Southern's passenger revenue was down by a hefty thirty-four percent and prophesied:

The increased use of automobiles, especially for short-distance travel, is the only prominent cause contributing to a reduction of railway passenger travel.... While it costs more to travel by automobile than it does by train, the automobile affords a convenience of time to which no railway schedule can be adjusted.¹⁴⁴

Wittingly or not – and, in light of the regulatory anti-trust atmosphere of the time, many have made persuasive arguments for the former – the government subsidized the displacement of railroads by paving highways, establishing interstates, building airports, and regulating railroads. Buses and trucks were not so regulated and enjoyed the use of publicly funded roads while the rail companies' privately owned infrastructure began to decay.

The Great Depression brought on a protracted period of decline for railroads; they deferred maintenance and cut costs at every opportunity. Few escaped receivership. During a sixteen year period, only a few new stations were built (such as Cincinnati, above). After World War II, the changes came more quickly. The airplane had proven its worth in combat, and thousands of pilots leaving the service found secure jobs in a growing commercial airline industry,¹⁴⁵ "skeletoniz[ing] what was left of long-distance rail travel."¹⁴⁶ Post-war euphoria sealed the coffin. Although few were pessimistic about the future of rail, no one really gave any serious thought to planning that future. Station design reflected functional priorities in a tedious,

¹⁴⁴ Davis, Burke, The Southern Railway: Road of the Innovators, p. 57.

¹⁴⁵ Potter, *op. cit.*, pp. 40-44.

¹⁴⁶ *Ibid.*, p. 44.

"lowest common denominator" sort of way. A comparison of the original depot at Arkansas City, Kansas (1888) with its replacement (1951) (Fig. 1.75) clearly delineates this trend, which ultimately lead to the construction (or what might be more accurately described as "the assemblage") of thousands of unimaginative metal boxes ("Amshacks") (Fig. 1.76). Mortgages were easy to obtain, and people flocked to suburban areas, accessible in most cases only by automobile, to start families. Travel by rail was rapidly becoming out of date, out of fashion, and inconvenient. The death blow fell when the United States Post Office began canceling its contracts with the railroads for mail service; with that, passenger train revenues plummeted.¹⁴⁷

Losing revenue at an alarming rate, railroads petitioned to be relieved of the passenger services they were required to provide under federal regulation. Some deliberately ignored their public facilities to scare away riders and improve their case (for if ridership went down, it would appear as if the railroad had little reason to maintain the service). The Southern Railway, in particular, became famous (or infamous) for operating trains that ran from "nowhere to nowhere" – trains ostensibly capable of serving "x" number of riders but which were never filled to capacity. To improve its case for release, Southern began breaking trains at state borders and then discontinuing them one state at a time.

On October 16, 1966, for example, the *Augusta Special* departed Charlotte, North Carolina, for its namesake city, but was halted just over the border at Warrenville, South Carolina. Southern Railway officials, who had informed no one (especially the unionized crew) of their intentions beforehand, started putting passengers into taxi cabs. From then on, the *Special* (Trains 31 and 32) operated only between Fort Mill and Warrenville, South Carolina, with four-hour layovers at each end.¹⁴⁸ Since the train operated only within that state, it naturally

¹⁴⁷ Trains Unlimited, "Atchison, Topeka & Santa Fe." The History Channel, 1997 (DVD).

¹⁴⁸ Frailey, Fred W., Twilight of the Great Trains, p. 121.

did not generate much revenue (let alone turn a profit), so, not surprisingly, the State of South Carolina approved when Southern applied to have it removed from service. During the tenure of President William Brosnan, Southern accomplished many good things,¹⁴⁹ but although the railroad retained its famous *Crescent* until 1979, it did so only by intentionally gutting the rest of its passenger service.

The vast, aging terminals that had been huge financial assets for so long suddenly became bottomless pits of expense and liability,¹⁵⁰ sometimes eating up as much as eighty percent of ticket revenue.¹⁵¹ A few "name" trains, such as the *California Zephyr*, continued to run for a few more years, but by the 1960s the nation clearly had the "disappearin" railroad blues." Passenger service had never really been the primary "money maker" for railroads; the money was always in freight. Freight does not get hungry, or complain when it is cold. The benefit of passenger service to the railroads was its ability, by advertising the company that operated it, to lure business that would return as freight revenue. Once it lost that ability, however, it lost its usefulness. Realizing that passenger service "would surely and shortly dwindle to zero,"¹⁵² Congress created the National Railroad Passenger Corporation, better known as Amtrak, in 1971. Within eight years, all of America's major railroads had completely abandoned the passenger business.

In recent years, Amtrak has been the subject of intense criticism and recurring questions about whether it should continue to be subsidized (even though the criticized "support" has never been more than minimal). Perhaps it should not; perhaps some private competition would do it

¹⁴⁹ Examples include: innovative track maintenance equipment, improved car handling, and the "Big John" hopper car in particular (Davis, Burke, *op. cit.*, pp. 226-249).

¹⁵⁰ Potter, *op. cit.*, pp. 40-45.

¹⁵¹ Meeks, *op. cit.*, p. 164.

¹⁵² Potter, *op. cit.*, p. 51.

¹⁵³ *Ibid.*, pp. 51-52.

some good – that is, after all, the way our economy is supposed to function – and Amtrak is by no means perfect. However, it is disingenuous of its detractors to place all the blame for the current state of rail travel in the United States on Amtrak's shoulders. In 1997, Congress ordered Amtrak to eliminate its dependency on federal subsidies by 2002, essentially by surviving on the farebox alone - something almost no railroad has ever done in the entire history of rail transportation.¹⁵⁴ Except for the significant exception of the "Northeast Corridor" (the route between Boston, New York, Philadelphia, and Washington), Amtrak has from the beginning been expected to collect passengers the way garbage trucks are expected to collect trash – to pick up the leftover people who can't afford "normal" transportation – and thus, in addition to being under funded, it has acquired a certain social stigma as well. It performs a job no one else has been willing to do for more than thirty years. Even though Amtrak is, by its charter, part of the *public* transportation system, from its inception it has never been given enough financial support to do more than collect the refuse of modern transportation - even while the government has consistently bailed out failing *private* airlines. In short, Amtrak has done the very most it can with very little at its disposal indeed, and there are hardly grounds upon which to criticize it for lacking "frills" when its very function is so little esteemed within our current culture.

In 1930, railroading had flourished for nearly a century. Since then, however, railroads, once the largest single employer in the country¹⁵⁵ (at one point, one in every six non-agrarian jobs was with a railroad¹⁵⁶), have been steadily shrinking, in part because of technological advances. Mail service, freight delivery, and telecommunications have each grown into separate major industries. Those services, once provided solely by the railroad, are now a mouse click

¹⁵⁴ *Railway Age*, "Amtrak's Rocky Road," April 2001. (http://www.railwayage.com/apr01/amtrak.html, October 14, 2005.

¹⁵⁵ Halberstadt, op. cit., p. 10.

¹⁵⁶ Potter, op. cit., p. 57.

away. America reached its peak track mileage – 264,000 miles of main, branches, sidings, and yards – around the time of World War I. In 1916, John Droege, superintendent of the New York, New Haven and Hartford, placed the number of passenger stations at 85,000.¹⁵⁷ Other sources place the number of stations built in the United States higher, as high as 140,000.¹⁵⁸ In 1974, the National Park Service estimated the number of remaining stations at 20,000, and by the 1990s, that figure was estimated to have fallen to less than 12,000. If one accepts Droege's number, that amounts to about fifteen percent of the stations constructed.¹⁵⁹ Of more than one thousand stations built in Kansas, approximately 140 exist today. One hundred or more of these have been moved from their original site and thirty are still in use by the railroads as storage or office space. Passengers are still serviced at five.¹⁶⁰

Inexplicably, we have forsaken a service and courtesy-oriented form of travel to endure the hostilities of airports and road rage. We do not even realize the extent to which railroad parlance characterizes our familiar speech. We drive "station wagons (although these, too, are disappearing)." We "lay tracks," get "sidetracked" and then get "on the right track" again. We drink "highball" cocktails, "lose steam," and fall "asleep at the switch." Yet we have no direct connection with these words, and they grow ever more meaningless to each generation. We celebrate wireless phones and electronic mail (and yet we seem to have less and less substantive communication) and higher speed limits (which we cheerfully ignore). We floor the accelerator to be that much closer to winning whatever race it is we are in. We wall ourselves off behind gated communities, and we are so conscious of instant and individual reward that perhaps we have forgotten the "end of the line." Where is all of our "convenience" taking us? It might do us

¹⁵⁷ *Ibid.*, p. 54.

¹⁵⁸ Halberstadt, op. cit., pp. 9-10.

¹⁵⁹ Potter, *op. cit.*, p. 54.

¹⁶⁰ Halberstadt, op. cit., p. 10.

some good, as a society, to be once again jostled about on a train on a regular basis; to be compelled to adjust our private schedules to a common one. Ironically, those passenger stations which survive still symbolize the very change, journey, and anticipation that defeated them thirty to forty years ago. They do not stand still, but instead represent the progress and speed that underpin the American perspective. Perhaps someday, our journey will bring us back to them.

ILLUSTRATIONS



Figure 1.1 (Potter, p. 28): Roundhouse at Albany, Georgia. Note the monitor roof, which helped ventilate the building.



Figure 1.2 (Armstrong, p. 47): Roundhouse at Proviso Yard, Chicago. Notice the standing water in the pit.



Figure 1.3 (Sides, p. 74): Southern Railway shops, Spencer, North Carolina. View is to the north; visible are the roundhouse (center background), sandhouse for storing sand for locomotive sandboxes (center foreground), and the "back" shops (top left).





Figure 1.5 (Sides, p. 65): Another view of the back shops. Note the stacks of drive wheels.



Figure 1.6 (Sides, p. 65): The machine shop.



Figure 1.7 (Sides, p. 64): Two views of the back shops. Note that the end of the building features a Spartan entablature and pediment, with faintly pronounced pilasters across the façade. On the side, the temple motif is reinforced by the recessed fenestration, giving the building a slightly colonnaded look. The suggestion of a classic Greek temple is subtle but unmistakable.

Figure 1.8 (Following page; Link and Garver, p. 28): "Wheeling" a locomotive at the Norfolk and Western shops in Roanoke, Virginia. The boiler (on the crane at top left) is being moved into position over the front set of drive wheels (this type of engine had two sets). Photo © O.W. Link.





Figure 1.9 (Potter, p. 9): Putting up telegraph wires along the transcontinental railroad near Ogden, Utah.



Figure 1.10 (Potter, p. 8): "Hooping up" the orders to an eastbound train on the New York, Chicago and St. Louis (more familiarly known as the "Nickel Plate"). Boswell, Indiana, 1949.



Figure 1.11 (Potter, p. 26): Unloading a Railway Express Agency car. REA was known for its fast and reliable shipments of perishables and personal packages.



Figure 1.12 (Author's collection): Salisbury, North Carolina. The station was large for a city of approximately 14,000. The matching REA building (demolished c. 1970) is just visible in the right background, under the sheds.

Figure 1.13 (Following page; author's collection): Salisbury, North Carolina (plan). A transcribed copy of Frank P. Milburn's plan for a station to offer numerous amenities to travelers making connections at Salisbury. The station was built three miles south of Southern Railway's sprawling Spencer Shops complex, and together the two facilities comprised the Southern's primary division point between Washington and Atlanta.





Figure 1.14 (Author's collection): Salisbury, North Carolina (south elevation). Milburn, who built several stations for the Southern, including a similar one at Charlotte, North Carolina (now lost), originally specified tin shingles as roofing materials; however, as constructed, the building bore a Spanish tile roof very similar to the ones C.C. Hook placed on his Piedmont and Northern stations.



Figure 1.15 (Historic Salisbury Foundation): A postcard view of the building from Depot Street shows extensive use of "triplets;" compare to 1802 design by J.N.L. Durand, below (Figure 1.16).



Figure 1.16 (Meeks, ill. 66): "Design, J.N.L. Durand, 1802")



Figure 1.17 (Potter, p. 30): Trenton Junction, New Jersey; Reading Railroad station garden, 1914.



Figure 1.18 (Potter, p. 11): Chesapeake & Ohio Standard Design No. 3 (c. 1892)



Figure 1.19 (Lyle, p. 126): C&O depot, Hawk's Nest, West Virginia, as it appeared in 1935.



Figure 1.20 (Wiley and Wallace, p. 110): Concord, North Carolina. Southern Railway standard design.



Figure 1.21 (Wiley and Wallace, p. 111): Southern Railway standard design, Hickory, North Carolina.



Figure 1.22 (Potter, p. 13): Ohio Central (later New York Central) station at Bucyrus, Ohio.



Figure 1.23 (Potter, p. 13): Alabama Great Southern (later Southern Railway) station at Fort Payne, Alabama.



Figure 1.24 (Potter, p. 34): The throat of Boston's South Station, c. 1930. The large "X" shape in its center indicates the presence of a double-slip switch. Mail and express platforms line the left hand side of the facility while platform tracks fan out to reach the head house.



Figure 1.25 (Meeks, ills. 2 and 3): Mount Clare Station, Baltimore (left), and Bewdley Tollhouse, Lancashire, England (right).



Figure 1.26 (Meeks, ill. 4): Cumberland National Highway tollhouse.



Figure 1.27 (Meeks, ill. 24): B&O station at Frederick, Md. (1831).



Figure 1.28 (Meeks, ill. 25): Syracuse & Utica R.R., Syracuse, N.Y. Note the pediment and the pilasters at the corners.



Figure 1.29 (Meeks, ills. 5 and 6): Boston & Lowell R.R. "Car House," Lowell, Mass.



Figure 1.30 (Meeks, ill. 22): First Thüringer Bahnhof, Leipzig.


Figure 1.31 (Meeks, ill. 23): Edward Lampson Henry, "The 9:45 A.M. Accommodation, Stratford, Connecticut."



Figure 1.32 (Halberstadt, p.15): Wichita, Kansas, 1880. This photograph is remarkably similar to the painting by E.L. Henry (above) – almost beyond the point of coincidence.



Figure 1.33 (Meeks, ill. 81): "Design No. 34," by Henry Holly.



Figure 1.34 (Meeks, ill. 82): Taunton, Mass. Attributed to Henry Holly.



Figure 1.35 (Meeks, ill. 36): New Haven Union Station, New Haven, Conn. Henry Austin.



Figure 1.36 (Meeks, ill. 69): Troy, New York, Union Depot.



Figure 1.37 (Meeks, ill. 31): Old Colony R.R. Station, Kneeland St., Boston.



Figure 1.38 (Meeks, ill. 68): Providence, Rhode Island, Union Station (Tefft).



Figure 1.39 (Meeks, ill. 73): Camden Station, Baltimore.



Figure 1.40 (Meeks, ill. 74): Harrisburg, Pa.



Figure 1.41 (Potter, p. 23): Ladies' waiting room, Seattle Union, May 20, 1911. Fresh flowers adorn the tables and rockers abound.



Figure 1.42 (Meeks, ill. 122): Park Square Station, Boston.

Figure 1.43 (Following page; Meeks, ill. 92): Train shed of cathedral-sized proportions; St. Pancras Station, London (Sir George Gilbert Scott, architect, and W.H. Barlow and R.M. Ordish, engineers). Note the Gothic arched windows and the slight point to which the shed roof rises.





Figure 1.44 (Meeks, ill. 124): Worcester, Mass., Union Station.



Figure 1.45 (Potter, p. 16): Worcester, Mass., Union Station. Distinctly different from the building which replaced it (following page, Fig. 1.46)



Figure 1.46 (Potter, p. 100): Of dramatically different style, this Union Station replaced the earlier one (above), the tower of which is visible in the left foreground. Worcester, Mass.



Figure 1.47 (Potter, p. 36): The first Bush shed, built at Hoboken, New Jersey (1906).



Figure 1.48 (Meeks, ill. 126): Broad Street Station, Philadelphia.



Figure 1.49 (Meeks, ill. 128): Reading Station, Philadelphia.



Figure 1.50 (Meeks, ill. 137): Union Station, New London, Conn. (H.H. Richarson).



Figure 1.51 (Meeks, ill. 136): North Easton, Mass. (H.H. Richardson).



Figure 1.52 (Halberstadt, p.105): St. Louis Union Station ("Richardsonian"/Romanesque).



Figure 1.53 (Solomon, p. 39): The restored and rehabilitated Grand Hall of St. Louis Union Station.

Figure 1.54 (Following page; Halberstadt, pp. 104-105.): The first Grand Central Station, New York City.





Figure 1.55 (Meeks, ill. 98): Train shed at First Grand Central; very similar to the shed at London's St. Pancras Station (above, Fig. 1.43).



Figure 1.56 (Author's photo): The Piedmont and Northern Railway passenger station at Anderson, S.C., notable for its large arched Main Street entrance.



Figure 1.57 (Solomon, p. 101): Pennsylvania Station, general view (from Seventh Avenue and Thirty-first Street).



Figure 1.58 (Holland, p. 22): Similar view; this one from the corner of Seventh Avenue and Thirty-third; more or less as it would appear looking west from the rooftop of Macy's.



Figure 1.59 (Solomon, pp. 100-101): Penn Station's main concourse, looking along the centerline of the building toward the Eighth Avenue entrance.



Figure 1.60 (Holland, p. 24): The general waiting room at Penn Station was the world's largest room in 1910, with a ceiling 150 feet high. In this view, the main concourse is to the left; the arcade to Seventh Avenue to the right.



Figure 1.61 (Holland, p. 24): Stairs down to track level in the Penn Station arcade, which looked and functioned, essentially, like a train shed.

Figure 1.62 (Following page; Meeks, ill. 166): Pennsylvania Station, plan. Seventh Avenue is at the bottom; on the left side is Thirty-first street. On either side, long ramps lead down from Seventh Avenue to service facilities. In the middle, the longitudinal axis carried pedestrian traffic from the arcade through the waiting room to the concourse – a brilliant architectural continuation of the line of Thirty-second Street, which terminated in front of the vestibule on Seventh Avenue. At the other end, the Pennsylvania Railroad's main line entered the city along the same line as Thirty-second Street. In a metaphorical sense, the building moved travelers between train and street in a straight line.





Figure 1.63 (Holland, p. 18): Grand Central Terminal, giving its regards to Forty-second Street.



Figure 1.64 (Holland, endpaper): The famous concourse and "the" clock, as famous a landmark as any in New York. One wonders if Cary Grant and Deborah Kerr might not have saved themselves considerable trouble had they simply agreed to meet here.



Figure 1.65 (Holland, p. 20): Grand Central Terminal restaurant in its Edwardian splendor.

Figure 1.66 (Following page; Doughy, pp. 94 and 97). Plan of Grand Central Terminal and immediate vicinity (top; note the amount of space devoted to support functions like mail and baggage), and detail of the plan of the distance-train concourse level (bottom; note the run around loop).







Figure 1.68 (Holland, p. 41): Washington, D.C. Union Station.



Figure 1.69 (Halberstadt, p. 107): Last of the greats, Cincinnati Union Terminal.



Figure 1.70 (Doughty, p. 114): Portion of the plan for Cincinnati Union. Note the attention to vehicle traffic at lower right and lower left.



Figure 1.71 (Doughty, p. 115): The taxi lane emerges from beneath the domed concourse to pick up people from the exit platform (Fig. 1.70, lower left).



Figure 1.72 (Doughty, p. 112): Above the various services surrounding the main concourse, the walls were decorated with murals depicting the history of America and Cincinnati.



Figure 1.73 (Doughty, back cover): The inside of the rotunda, looking out of the arch (Fig. 1.69).



Figure 1.74 (Doughty, pp. 110-111): Anatomy of a terminal. This plan view of the 300-acre site on which Cincinnati Union sits looks like something out of a Gray's medical text. The sheer size of the entire facility is staggering, and yet, in contrast, the station itself (toward the south end, visible at lower right in the top half of the image) uses comparatively little of the site – all the rest is in some way devoted to supporting its operation. Visible are two large freight yards and several smaller ones, an enormous coach yard and engine terminal, an equally large mail and baggage facility, and two extremely complex throats binding together the platform tracks with crossovers, double crossovers, and slip switches.



Figure 1.75 (Potter, p. 45): Arkansas City, Kansas, in 1888 (top) and 1951 (bottom).



Figure 1.76 (Halberstadt, p. 86): An "Amshack."

CHAPTER TWO

THE PIEDMONT AND NORTHERN RAILWAY

(Illustrations begin on page one hundred twenty-two.)

HISTORY

The Piedmont and Northern Railway was an extremely unique development in railroading in the rural American South in the early twentieth century. Conceived as an electric interurban linking the prosperous cotton mill towns of the rolling piedmont region of North and South Carolina, the Piedmont and Northern (P&N) was the brainchild of tobacco and utility magnate James Buchanan "Buck" Duke.¹ Duke, already famous as the founder of the American Tobacco Company, was also president of the Southern Power Company and the founder of Duke Power Company. He was able to foresee the important role that hydroelectric power would play in stimulating the urbanization, industrialization, and economic growth of the rural South, and firmly believed that a railroad – fueled, of course, by the "juice" generated by *his* power plants – would be a lucrative investment in the region's infrastructure.² Duke further believed that a viable contender for traffic would challenge and break the monopoly of the region's primary carrier, the Southern Railway.³

What became the P&N originated in a 1909 Southern Power Company plan to construct an electric interurban railway between the major communities of the piedmont Carolinas.⁴ "Major" is a relative term; the average population of the cities to be linked by the railroad was

¹ Fetters, Thomas T. and Swanson, Peter W., Piedmont and Northern: The Great Electric System of the South, p. 10

² Id.

³ *Ibid.*, p. 13.

⁴ Fetters and Swanson, op. cit., p. 11.

around 12,000.⁵ Streetcar systems had developed, to an extent, in the larger cities of the South, but nowhere was there yet an electric rail system of any kind to compare with the large systems of the Northeast and Upper Midwest.⁶

Two private railroad companies were formed to build the new railway. Duke and several investors formed the Piedmont Traction Company, chartered January 8, 1910, in North Carolina, while the South Carolina state legislature chartered the Greenville, Spartanburg, & Anderson Railway on March 10, 1910, in that state.⁷ By the end of the spring of 1910, engineers had completed surveys of two geographically unconnected portions of the proposed route – a twenty-one-mile long line from Charlotte to Gastonia, North Carolina, and a ninety-eight-mile long section from Greenwood to Spartanburg, South Carolina.⁸ However, in what was to prove a fateful decision, the survey of the middle section of the route – from Gastonia south to Spartanburg – was not completed before construction began on the other two divisions, and construction on that portion of the line was postponed, perhaps to allow time for generating capital.

The Piedmont and Northern Railway, by that name, was organized as a publicly owned "holding" company, to be capitalized at \$5,000,000, beginning in the fall of 1910.⁹ Duke pitched his railroad to local mill owners and invited them to become stockholders on the basis of twenty-five cents per spindle in their cotton mills and a pledge to ship at least fifty percent of their freight over the new line.¹⁰ Investors were overwhelmingly enthusiastic about the railroad's prospects, with cities meeting anticipated levels of investment literally overnight. More than one

- ⁹ *Ibid.,* p. 13.
- ¹⁰ *Ibid.*, p. 14.

⁵ *Ibid.*, p. 10.

⁶ *Ibid.*, pp. 9-10.

⁷ *Ibid.*, p. 12.

⁸ Id.

third of the stock subscriptions sought in Greenville were raised at a single event on January 17, 1911; just five days later, the founders met seventy-five percent of their goal for subscriptions in Charlotte.¹¹

Enthusiasm over the interurban swept a congress of commercial and professional men of Charlotte off their feet last night in the assembly room of the Selwyn Hotel after Vice-President W.S. Lee and Zebulon V. Taylor had made ringing and convincing arguments in behalf of this immense development; and as a result of the inspiration which flourished under the enthusiasm of the occasion a subscription of \$222,000 of the needed \$300,000 was secured.¹²

Although today such zeal sounds as though it could have been lifted right out of *The Music Man*, at the time electricity was such a marvel of technology and largely unfamiliar to the rural South that the idea of an electric railroad devoted to local business interests was genuinely thrilling. Anderson, South Carolina, was already styling itself "The Electric City" as a result of the cheap supply of electricity it received from a hydroelectric plant twenty miles away on the Seneca River (one of the world's first such long-distance transmission lines).¹³

Plans for the railroad were ambitious. It was the first electric railroad in the nation capable of providing both heavy freight and passenger service to communities across a large geographic region in two states.¹⁴ By the standards of the time, that volume of traffic would require a working load of 1,500 volts direct current (DC). Eight (later eleven¹⁵) substations (Figs. 2.1 and 2.2) would each convert 2,200 alternating current (AC) volts from the power company into the necessary direct current and voltage through automatic generator sets and deliver it to a heavy-duty overhead catenary system.¹⁶

¹¹ Id.

¹² Charlotte Observer, January 21, 1911 (qtd. in Lynch, op. cit., p. 4).

¹³ Fetters and Swanson, op. cit., p. 10.

¹⁴ Lynch, *op. cit.*, p. 7.

¹⁵ Lynch, Thomas G., ed., *Semaphore*, December, 1951, p. 5.

¹⁶ Fetters and Swanson, op. cit., p. 12.

The railroad's first objective was to complete the construction work already begun and afterwards assume ownership of the two existing companies. It would then construct the partially surveyed section, completing an unbroken line south from Charlotte, North Carolina, to Greenwood, South Carolina. Further, the long term goal was to build the railroad north from Charlotte to Winston-Salem, North Carolina, or Norfolk, Virginia,¹⁷ a distance which obviously would have precluded the operation of interurban through-trains over its entire length. Gaining access to the port of Norfolk, rather than one less distant (such as Charleston), made sense to planners for a variety of practical, political, and economic reasons.

For example, by building in a northeasterly direction, the railroad could follow existing transportation networks and population centers. In general, railroads (and today, highways) in the Carolinas are oriented northeast to southwest. To some extent, it was easier, physically, to build this route because of the grade considerations involved. Other reasons for a northeasterly route were that Norfolk was a larger port and closer to the industrial Northeast. By building northeastwards, the P&N would be able to connect with the Norfolk and Western at Winston-Salem or with the Virginian Railway at Norfolk. The P&N would have stood to profit much from that arrangement; the N&W and the Virginian were two of the nation's largest coal shippers and Duke's powerplants were coal-fed. Finished textile products go out, coal comes in; textile mills profit and expand, buy more electricity, and everybody wins. Furthermore, like the P&N, the Virginian was an electric railroad, and both it and the N&W were profitable east-west routes that crossed the Appalachians and reached into the Upper Midwest. In short, the Norfolk market was a far more valuable one as far as the P&N was concerned.

As construction work got underway, contracts for substation and other electrical equipment, including a highly unusual signaling system, were issued to Westinghouse Electric &

¹⁷ *Ibid.*, p. 13.

Manufacturing Company (Figs. 2.3-2.5). The signal system consisted of lower quadrant semaphores which could be tripped to "STOP" by the dispatcher when he had modified train orders for a crew. The crew would stop and telephone the dispatcher from a callbox mounted on the signal mast, update the train orders in their order book, reset the signal, and proceed with their train with the permission of the dispatcher.¹⁸

Work in North Carolina proceeded from two ends – west from Charlotte and east from Gastonia – in April, 1911.¹⁹ From the site of the station being built on Mint Street in Charlotte, the line headed west a few miles to Hoskins Road, then another half mile to a site on which the road built a yard to interchange traffic with the Seaboard Air Line.²⁰ The P&N also located its shops here, and the site acquired the name "Pinoco," a contraction of **Pi**edmont and **No**rthern **Co**mpany. Over time, probably as a result of dialect, the "o" became an "a" and the name "Pinoca" stuck.²¹ By August, 1911, the line was complete from Pinoca, through Thrift, and onward to the east bank of the Catawba River, just across from Mount Holly and at the site of the Southern Dyestuff Company ("Sodyeco").²² A three-span steel bridge built by the American Bridge Company carried the P&N across the Catawba River and into Mount Holly, where it again interchanged with the Seaboard Air Line.²³

From Mount Holly, the P&N headed to the mill villages of Lowell, Ranlo, and Groves before turning to duck under the Southern Railway and enter Gastonia. To get the railroad into downtown Gastonia, the P&N connected to the Gastonia trolley line, which ran down the middle of Franklin Avenue. The P&N interurban trains traveled this stretch of streetcar line for two or

- ¹⁹ *Ibid.*, p. 15.
- 20 *Id.*
- ²¹ *Ibid.*, p. 16. ²² *Id*.
- $^{1a.}$ 23 Id.

¹⁸ *Ibid.*, p. 16.

three blocks before turning into the P&N yard situated between Franklin, Broad, and Main Streets. At the yard, interchange tracks connected to the Southern Railway and the Carolina and Northwestern Railroad (a Southern subsidiary).²⁴ Parts of the line opened as early as April; through passenger and freight service between Charlotte and Gastonia commenced on April 3, 1912.²⁵

In South Carolina, construction started on the Greenwood-Belton section of the main line during the summer of 1911.²⁶ The line began at Greenwood, South Carolina, where it shared depot facilities and interchanged traffic with the Seaboard Air Line Railway.²⁷ The P&N located a small yard (four or five tracks and a wye) about a mile west to classify cars for interchange with the Seaboard (and the Southern).²⁸ From Greenwood, the P&N rails headed northwest up gentle grades toward Greenville, where the headquarters of the South Carolina Division were located, and then east to Spartanburg.²⁹ Along the way, the railroad wound loosely through the expansive pine forests, small farms, and tiny villages of the rolling South Carolina foothills, paralleling from end to end the Southern Railway's Greenwood-Greenville branch line and the very busy Southern trunk line from Greenville to Spartanburg. Smaller and more flexible, the P&N served small communities like Hodges, Honea Path, White Horse, and Golden Grove with far greater attention to their needs than did its competitors, which in some cases did not serve them at all. As it passed through these small farming and mill communities, the P&N main line was dotted with substantially built stations. These stations, uniformly constructed of yellow and terracotta red brick, featured red "Spanish" tile roofs and were adorned with modest architectural

- ²⁶ *Ibid.*, p. 15.
- ²⁷ *Ibid.*, p. 17.
- ²⁸ *Id*.

²⁴ Id.

²⁵ *Ibid.*, p. 17.

²⁹ *Ibid.*, pp. 15-19.

details, such as cornice brackets. They were emblematic of the service-oriented ethic that the P&N maintained and promoted in this sparsely inhabited region of working-class families and industries, helping the railroad earn its reputation for providing "service with courtesy."

Fifteen miles north of Greenwood, the P&N interchanged traffic (as did the Southern, in this case) with the Ware Shoals Railroad – all five miles of it – which served a collection of textile mills in the nearby town of Ware Shoals.³⁰ The P&N made a similar connection, at Donalds, with the three-foot gauge Due West Railroad, which operated between Donalds and the nearby town of Due West, South Carolina, home of Erskine College. The DWRR was then one of last narrowgauge railroads east of the Appalachians³¹, operating an unusual type of steam locomotive known as a "dinky."³² From Shoals Junction, it was another sixteen miles north to Belton and the P&N junction with its branch line to Anderson, South Carolina. The first trains were operated over the Greenwood to Belton line in September, 1911.³³ A few miles north of Belton, the line bit into two tight back-to-back ninety-degree turns to duck and dodge under the Southern as both railroads began their climb out of the Saluda River valley that wound around Pelzer, S.C.

The P&N situated its South Carolina shops and offices at Greenville, building a large yard at a twenty-acre site a mile and a half from downtown, at the point where the main line crossed the Reedy River. The area was known as River Junction, and the P&N facility included a large machine shop for routine and overhaul service, cranes and inspection pits, and a car barn for storage. A spur ran from River Junction to the P&N depot in downtown Greenville.³⁴ That station, like all P&N depots, was a building that (initially) combined freight and passenger

³⁰ *Ibid.*, p. 17.

³¹ Id.

 ³² Johnson, Laura, personal interview, October 5, 2005.
³³ Fetters and Swanson, *op. cit*, p. 18.

³⁴ *Ibid.*, p. 19.

facilities under one roof. Usually the passenger area occupied a hipped roof, two-story block at one end with an adjacent single story freight area protected by a gabled (sometimes hipped) roof. Originally, P&N passenger trains operating out of the Greenville station were turned, before departure, on a loop of downtown trolley track laid in the middle of four city streets – they were literally run around the block.³⁵ Although the yard and shops at River Junction were not yet complete, the Greenwood-Greenville section opened to traffic in June, 1912. At Greenville, the P&N exchanged traffic with the Southern, the Charleston & Western Carolina (affiliated with the Atlantic Coast Line Railroad), and the Greenville & Northern, affectionately known as the "Swamp Rabbit."³⁶ The mile and a half from downtown Greenville to River Junction was a busy scene of rail activity, with the P&N, the G&N, the C&WC, and the Reedy River all running parallel within a few yards of each other.

The line to Spartanburg took another year and a half to complete, mainly because in turning to the east, the line was now being laid "against the grain" of the land, and large sections of cut-and-fill were required to bring it to grade.³⁷ It was on this section that the railroad erected its longest and tallest structure, a steel trestle nine hundred feet long and eighty feet high that spanned the Enoree River at Chick Springs, South Carolina.³⁸ The railway then passed through the cotton-gin town of Greer before crossing the South, Middle, and North Tyger Rivers on a series of bridges. The crossing at the Middle Tyger was unusual in that the P&N passed over the river and under the Southern Railway again almost at the same point, resulting in a three-level

³⁵ Id.

³⁶ The P&N, incidentally, had its own nickname: "Pore & Needy."

³⁷ Fetters and Swanson, op. cit., p. 19.

³⁸ Id.

crossing. Approaching Spartanburg from the west, the P&N passed through the cotton mill communities of Clevedale, Arcadia, and Saxon.³⁹

Spartanburg was the northern terminus of the division and an important inlet/outlet for traffic to and from cities in the north, east, and southeast. Here the P&N exchanged traffic with the ubiquitous Southern, the Charleston & Western Carolina again, and - importantly - the Carolina, Clinchfield and Ohio⁴⁰ (later, after a reorganization, the name was shortened to Clinchfield Railroad). It was from the Clinchfield that the P&N received the lion's share of the coal it hauled for the Duke Power Company in South Carolina, particularly to the large Lee Power Plant near Pelzer. From start to finish, coal was a crucial source of income and would eventually comprise forty percent of the railroad's total revenue. With completion of the line from Greenville to Spartanburg in the spring of 1914, the entire South Carolina division was opened to revenue service; the first through passenger train ran from Greenwood to Spartanburg on March 23.41

The railroad scheduled nine passenger trains a day in both directions, or one every hour and twenty minutes between 6:30 a.m. and 10:00 p.m., with fares costing two and one-half cents per mile. 500-mile commutation booklets ("commuted" or reduced fares, hence "commuters," see Chapter One, p. 31) could be purchased for two cents per mile. Initially, two freights were scheduled in each direction, but this was soon increased to three and again to four.⁴² On May 20, the Piedmont and Northern Railway formally assumed ownership of the Piedmont Traction Company in North Carolina and the Greenville, Spartanburg and Anderson was absorbed June

- ³⁹ Id. ⁴⁰ Id.
- ⁴¹ *Id*. ⁴² *Id*.
14. Thus, by 1914 the two lines were united under the ownership of a single company.⁴³ But there was still a fifty-mile gap separating them, and in the summer of 1914 world events were looming which would cast serious doubts on the prospect of uniting them physically.

Because the P&N was a bridge route, freight became one of the road's primary sources of revenue almost from the beginning of operations. The railroad started with six fifty-five-ton Baldwin "steeplecab" locomotives (Fig. 2.6), each equipped with four 185-horsepower motors and capable of handling a twenty-car train. Delivered in 1912 and numbered 5000 through 5005, one was assigned to the North Carolina division and five to the South Carolina division.⁴⁴ Six freight locomotives soon turned out to be insufficient as the railroad's freight business increased rapidly, so the P&N placed a June, 1912 order for six more locomotives. These "boxcabs" (Fig. 2.7) were built by General Electric and were heavier than the Baldwins; each was able to pull ten more cars than the steeplecabs. They were delivered in the winter of 1913-14 and, initially, all six went into service pulling the long-distance trains in South Carolina.⁴⁵

Passenger revenue was substantial in its own right during the early years of the railroad's existence; it was not unusual for the road to operate six-car interurban trains to meet demand.⁴⁶ The P&N made its first purchase of cars, twenty-three in number, from the Jewett Car Company of Newark, Ohio, in July, 1910. (Fig. 2.8) These lovely cars, sheathed outside with narrow tongue-and-groove siding and finished inside in plush leather and mahogany, could seat about sixty passengers in three compartments and had an express freight compartment at one end, just behind the operator's station. They were designed not only for "stop-and-go" local service, but also for eighty-mile-per-hour express runs. The top lights in the arched windows and in the

- ⁴³ *Id.* ⁴⁴ *Ibid.*, p. 24.
- ⁴⁵ Id.

⁴⁶ *Ibid.*, p. 27.

clerestory of the car roof were of opaque glass that spread soft, diffused light into the interior. Each car was powered by four 100-horsepower Westinghouse motors. Westinghouse was so proud of the equipment it designed for the P&N, that it frequently featured P&N cars in its advertising pamphlets. Six of the Jewett cars (Nos. 2000-2005) were sublettered "P.T.Co." and were operated in North Carolina, the remaining seventeen (Nos. 2006-2022), were sublettered "G.S.&A." and operated in South Carolina.⁴⁷

In addition to the Jewett cars, the P&N purchased eight "express motors" (Fig. 2.9) from the Southern Car Company, headquartered in High Point, North Carolina.⁴⁸ These cars were equipped with 100-horsepower motors (presumably also provided by Westinghouse, since technically they were identical to the Jewetts) and numbered 4000 through 4007. As express cars, they featured a single "open compartment with large central side doors."⁴⁹ In four or fivecar interurban trains, they were often the lead unit, and were also occasionally pressed into service as locomotives for short freights.⁵⁰ Southern Car Company also built ten all-steel, unpowered, trailer cars for the P&N: two combinations, six coaches, and the *Saluda* and the *Catawba*. Although common on the steam railroads' "name trains," these were unusual cars for interurban service, for they were first-class parlor-observation cars that featured open rear platforms with awnings and brass railings. Their interiors were like private clubs, featuring deep carpet, swivel chairs, cut-glass mirrors, chandeliers, and wood paneling.⁵¹

⁴⁷ *Ibid.*, pp. 21-23.

⁴⁸ Southern Car Company was another of Duke's entrepreneurial interests. It was established in 1903 and was bought out in 1914 (presumably after filling its orders for the P&N) by Perley A. Thomas, becoming the Thomas car works. The Thomas company went on to become the single largest maker of school bus bodies in the United States. (Powell, William S., *North Carolina through Four Centuries,* p. 477.)

⁴⁹ Fetters and Swanson, *op. cit.*

⁵⁰ Id.

⁵¹ *Ibid.*, p. 29.

In 1915, the first year the railroad grossed \$1,000,000, a third of that figure came from passenger revenue.⁵² Piedmont Carolina towns were far removed from the "Great White Cities" of the Northeast and Upper Midwest, but they quickly embraced "the electric" as a marvel of technology that would ensure their survival and afford them an opportunity to grow and prosper – a feeling underscored by the railroad company's institution of an industrial development program within its sales department.⁵³ The textile industry had been growing for a number of years and was approaching its zenith in the South during the 1910s and 1920s, with weaving and finishing plants, bleacheries, and print and dye mills springing up in virtually every town along the geographic fall line (Fig. 2.10). Water-powered mills had first been established here during the late nineteenth century, and the advent of hydroelectric power, coupled with efficient rail service, promised continued prosperity for the mill towns.

The fast service and particular attention paid to local problems which the small, home owned line offered the shipper was a major sales tool in soliciting new business.

Passenger traffic [prospered] at the same time. More and more Carolinians found that the clean, quick way to take a business trip or to make a weekend visit was to take the "electric."⁵⁴

The P&N was indeed well suited to attending to the local concerns of these businesses; with its close ties to Duke's electric power companies, it is probably fair to say that the railroad was more readily viewed as an extension of their utility services than as a separate corporation merely looking after its own interests. In other words, the railroad was perceived to share the same fate as the communities themselves and thus had a distinct home field advantage over any "outside" carrier. One indication of the close-knit relationships P&N fostered in the communities it served is the fact that it often operated excursion trains with reduced fares. These

⁵² Fetters and Swanson, op. cit., p. 29 (See Lynch, op. cit., p. 8.)

⁵³ *Ibid.*, p. 27.

⁵⁴ *Id*.

would be operated for special occasions such as community picnics and festivals. A flyer from 1916, for example, advertises a round trip "colored" train for black riders only (who under normal circumstances would have paid full fare and ridden in segregated cars) to be operated from Anderson to Greenville and all points in between for an Easter weekend baseball game. Another advertises a special trip to the Greenwood Baptist Orphanage thus: "Everyone Should Be Interested in This Institution and Should Take Advantage of the Extremely Low Rate Offered for This Particular Date," reads the flyer, and extremely low indeed it was - \$1.00 for an eighty mile round trip from Anderson.⁵⁵ The Industrial Development Department worked to bring to the region industries that were indirectly associated with textile milling (many of them then based in the North, such as machinery factories and chemical plants) by locating plant sites and providing those companies with access to an established market for their goods and services which they probably would not otherwise have sought out or enjoyed.⁵⁶ Manufacturers of finished products were simply unheard of in the South at that time; the traditional economic estimation of the region as a whole was that its worth lay solely in the export of raw materials, an opinion widely held both within the region and without. A network of businesses and friendships quickly developed and became a successful and self-sustaining sales tool for soliciting new business; it also became a thorn in the corporate side of the Southern Railway, whose freight solicitors began privately referring to the P&N as "that... damned trolley line."⁵⁷

The railroad's success prompted a wide variety of promoters, self-ordained tycoons, and outright carpetbaggers to come out of the woodwork from all over with plans to connect the P&N to every inhabited place from Atlanta to Cross Anchor, S.C. Duke himself had been interested in the Atlanta connection, but feasibility studies indicated that such a line would not be

⁵⁵ Fetters and Swanson, pp. 28-35.

⁵⁶ Lynch, Thomas G., telephone interview, July 27, 2004.

⁵⁷ Fetters and Swanson, op. cit., p. 47.

profitable and the railroad pursued the idea no further. This, however, did not deter at least one "music man" of sorts, a man named Murphy, from trying to promote not only a connection to Atlanta, but also "through electric car service from Raleigh [where Duke interests also controlled the Durham & Southern] to the capital of Georgia, passing through some of the best country in the South."⁵⁸ He never mentioned, of course, the twenty or so odd hours of uninterrupted travel such a trolley ride would take. Nevertheless, he barnstormed the countryside, paying calls on landowners and making public appearances, soliciting capital subscriptions from the populace and claiming that none of it would be collected until the first trains ran. Unfortunately for Mr. Murphy, he pitted communities along three possible routes⁵⁹ against each other in an effort to get committals to one, thereby stirring up enough animosity to prevent any of them from coming to fruition. Eventually Murphy and the unseen backers he claimed to represent melted away, taking with him forever the idea of an Atlanta connection for the P&N.

Despite deft management and a proven ability to "float like a butterfly, sting like a bee," the P&N was soon to encounter a formidable foe in the form of the United States Railroad Administration. World War I had brought an initial boom to the P&N and the textile mills it served, "result[ing] in even more freight and passenger traffic."⁶⁰ Two army camps were built near Spartanburg and Greenville to train the U.S. Army's Twenty-seventh Infantry Division from New York. The influx of troops to the area and rising wartime demands in general forced the railroad to schedule a minimum of eighty passenger trains a day, placing a strain on personnel and equipment.

⁵⁸ *Ibid.*, p. 31.

⁵⁹ The general course of the route was to run from Anderson, South Carolina to Hartwell, Georgia; from there to Commerce, and then on to Atlanta. It is interesting to ponder how small Georgia towns, such as Hartwell, Royston, or Jefferson, might have developed differently had Murphy succeeded.

⁶⁰ Fetters and Swanson, op. cit., p. 31.

One of the very few positive things to come out of the P&N's wartime existence was the development of a four-truck (articulated) electric freight locomotive at the railroad's shops at Pinoca, North Carolina, by Chief Electrician Fred A. Noblett.⁶¹ Noblett started with the P&N in 1914 with "a correspondence course knowledge of electricity"⁶² under his belt. He was not a formal locomotive designer, but his design for locomotive No. 5500 (Fig. 2.11), which relied on a variety of spare parts and materials, was, in the words of P&N historian Thomas Fetters, "ingenious:"

Two engine beds, similar in size and construction to the frames of the engines already in service, were built in the Pinoca shops. The beds were then connected with a yoke-andpin joint which allowed each to move independently as the roadbed undulated. Then the body and frame of one of the 4000-class express motor cars (fifty-foot wooden interurban cars on Brill trucks built by Southern Car Company of High Point, N.C.) was set onto these joined frames, with pivots (located where the express car's trucks had originally been mounted) connecting the body to the lower frames. Four spare Baldwin trucks were rolled in under the assembly, attached to the bolsters, and the engine was nearly completed.

Locomotive No. 5500 was probably the first engine of the B-B + B-B configuration ever built, although several other railroads and some manufacturers later built engines of the same type. These four truck articulated engines were a trademark of the Piedmont & Northern for thirty-five years until the end of electric service. The power of the eight motors under a single controller enabled the engine to pull a 1,000 ton train. Noblett's ingenious articulation system permitted the engine to traverse extremely sharp curves and switchwork despite its length of sixty-four feet. Engine No. 5500 was a complete success, and so shortly two sister engines, Nos. 5501 and 5502, were built.⁶³

The 5500-class locomotives proved so successful that five more similar units were built over the

years and used throughout the system.

With America's entrance into World War I, the Piedmont and Northern was taken over

by the federal government, as were all of the country's railroads, and placed in the dubious foster

⁶¹ Locomotive innovation was the refuge to which the steam railroads also flocked during this period, several of which (in particular the Norfolk and Western) became accomplished locomotive builders. The pre-war designs of the 4-6-2 "Pacific" and the 2-8-2 "Mikado" types were further refined at this time (e.g., Southern Railway's Ps-4 class of Pacifics) and led to Lima Locomotive Works' 1925 development of larger fireboxes and high-pressure boilers for "superheated" steam locomotives, such as the 4-8-2 "Mountain" and 2-8-4 "Berkshire" types. (http:// www.steamlocomotive.com/)

⁶² Lynch, Thomas G., ed., Semaphore, March, 1956, p. 6.

⁶³ Fetters and Swanson, op. cit., pp. 35-36.

care of the USRA's Southern Region on December 28, 1917.⁶⁴ Unfortunately, this region was controlled by representatives of the rival steam railroads, the Southern Railway in particular.⁶⁵ The P&N quickly began to reflect the less than favorable regard in which it was held by the new management. For more than two years, from the end of 1917 until the spring of 1920, when the federal government finally relinquished control (well after the end of the war it had seized the railroad to fight), maintenance was deferred on facilities, track, rolling stock, and other equipment. Depots were closed, no one sought out new business, and as much traffic as possible was diverted to the steam railroads.⁶⁶ Had it not been for the army camps, which guaranteed continuous operation, the P&N might not have survived at all. Loyal P&N employees and customers firmly believed that the mismanagement and neglect suffered at the hands of the USRA were a direct result of enmity between James B. Duke and railroad baron J.P. Morgan, king of the Southern Railway empire. They suspected, and in all likelihood rightly so, that Duke had offended the Morgan interests in his attempt to break the Southern's monopoly in the region.⁶⁷ However, in fairness it must also be said that, under federal management, the Southern fared little better itself.

Railroad competition ended once [William G.] McAdoo assumed control of the USRA. Offline traffic offices [on the Southern Railway] were abolished at once and many other traffic solicitation jobs were eliminated. The Southern absorbed some of these employees in other departments, but most of them were dismissed. Thousands of others... left Southern for military service, or to work in

⁶⁴ *Ibid.*, p. 36.

⁶⁵ Davis, Burke, *The Southern Railway: Road of the Innovators*, p. 59. The USRA was headed by a "czar" named William Gibbs McAdoo. The Federal manager of the Southern Region was Eugene H. Coapman, Southern Railway vice president and general manager. The USRA was ostensibly a response to the "failure" of American railroads to efficiently coordinate transportation for the war effort. It went unmentioned that such coordinated service between competing companies was forbidden by federal law and would have made them vulnerable to anti-trust actions. At the same time, none of them wanted to throw away their competitive advantages, so traffic logjams and delays at overcrowded yards and ports soon developed. The railroads turned on each other, the bigger boys preying upon the smaller in order to sustain themselves.

⁶⁶ Fetters and Swanson, op. cit., p. 36.

munitions plants and shipyards. The effect upon Southern's operations was profound. 68

After two years of organized neglect, the P&N faced an extensive rehabilitation program and immediately set about recapturing lost freight and passenger business. Over the next five years, the railroad repaired, replaced, and reconditioned at a total cost of more than \$300,000,⁶⁹ a considerable sum for a railroad capitalized at \$5,000,000 only six years before. At the same time, passenger revenue began to flag as improved roads began to sprout across the territory and as automobiles became more affordable.⁷⁰ The P&N immediately took advantage of the trend by ordering more freight cars and becoming a leader in delivering automobiles in the region.⁷¹

At the same time, P&N President William States Lee reorganized the road's passenger equipment to more efficiently cope with decreased demand. The unpowered, all-steel trailer cars were shopped and emerged with motors taken from the aging wooden interurban cars. Although a few of the wooden cars were kept in service, most were not; some were converted for use as yard offices, others were sold to the public as houses, and some were scrapped. The steel cars received new numbers as part of their conversion, starting with 2100.⁷² Further, Lee sent one of the grand observation cars, the *Saluda*, to River Junction shops to be converted to a business car for the railroad's executives. The *Carolina*, as it was rechristened, kept the old observation platform but received an entirely new interior that included compact bedrooms, a steward's quarters, an office-lounge, a kitchen, and a bath. The car's original two-axle trucks were

⁶⁸ Davis, Burke, op. cit., p. 59.

⁶⁹ Fetters and Swanson, op. cit., p. 37.

⁷⁰ *Ibid.*, pp. 38-39.

⁷¹ *Ibid.*, p. 41.

⁷² *Ibid.*, p. 39.

removed and new three-axle Pullman trucks installed, giving the car the smoothest and most comfortable ride possible.⁷³

Although passenger traffic began to wane, however, freight traffic continued to grow – so fast that Noblett, promoted to master mechanic in 1925 and now "the grand man of the Greenville Shops,"⁷⁴ was instructed to build more locomotives. No. 5601 became the first of series of powerful electric freight locomotives he built (or, more accurately, *re*-built) from the older 5500 series. Like the 5500s, the new units were articulated four-truck arrangements, but had more powerful motors and all-steel bodies. Rolled out in January of 1925, No. 5601 was warmly received in numerous trade articles, and earned the small railroad a big reputation as a locomotive builder.⁷⁵ Innovations such as Noblett's locomotive program became a hallmark of P&N service, and by the middle of the 1920s the railroad had nearly recuperated from the USRA seizure.⁷⁶

The recovery was so thorough that by 1924, almost fourteen years after the Spartanburg-Gastonia extension had been delayed, Duke had decided that it was time to take another look at physically connecting the two divisions and expanding the railroad as a whole.⁷⁷ The idea had never been abandoned, but a second feasibility study undertaken in 1916 had been eclipsed by wartime demands, and further study was simply unthinkable during the years of federal control. Vice President and General Manager Edgar Thomason, who had resigned in disgust during the USRA years, was brought back to the railroad to oversee the Spartanburg-Gastonia project.⁷⁸

⁷³ *Ibid.*, p. 41. A similar car was the *Doris*, Duke's private car built by the Pullman Company and named after his daughter. Although it was a P&N car, it spent most of its time traveling other railroads as Duke shuttled back and forth between his various homes and offices. The *Doris* is currently on display at the North Carolina Transportation Museum in Spencer, North Carolina.

⁷⁴ Lynch, *op. cit.*, p. 7.

⁷⁵ Fetters and Swanson, *op. cit.*, p. 41.

⁷⁶ Id.

⁷⁷ *Ibid.*, p. 43.

⁷⁸ Id.

Thomason had headed the 1916 study and was intimately familiar with the general expansion aims, operational capabilities, and overall needs of the railroad. Thomason came up with a threeyear, \$11,000,000 expansion program in which filling the Spartanburg-Gastonia gap was the first of two phases. The line connecting the two cities and uniting the P&N's two divisions would, as elsewhere, parallel the Southern's Washington-Atlanta corridor at a cost of roughly \$5,000,000. The second phase called for constructing a line seventy-two miles northward from Charlotte, through the North Carolina mill towns of Concord, Kannapolis, Salisbury, and Lexington, to connect with the Norfolk and Western at Winston-Salem, North Carolina.⁷⁹ Part of the preferred route involved grading and construction, but Thomason sought to keep all-new construction at a minimum wherever possible, and he also sought to obtain trackage rights over the existing routes of the Norfolk and Southern Railroad (one of the predecessors of, but not the same as, today's "Norfolk Southern Corp.") and the Winston-Salem Southbound Railroad.⁸⁰ The entire project would more than double the length of the P&N and would give it greater access to northern markets, as well as expanding its role as a bridge route between southern routes.⁸¹ Bv connecting with the Norfolk and Western, P&N customers would have an almost direct connection to the port of Norfolk and potentially be able to avoid paying Southern's high transfer and interchange rates altogether.⁸²

James Buchanan Duke, the father of the P&N and its guiding influence for more than fifteen years, died in 1925 at the age of sixty-nine. It was more than a year, while his estate was disposed, before the railroad could take any action on its ambitious expansion program.⁸³ In

⁷⁹ *Ibid.*, p. 45.

⁸⁰ Grade profiles, track plans, letters, and correspondence, University of North Carolina at Charlotte, Manuscript Collection 16.

⁸¹ Fetters and Swanson, op. cit., p. 45.

⁸² It was actually cheaper for the P&N to route traffic circuitously between its divisions over the Seaboard, between Greenwood and Charlotte, than over the much shorter Southern line between Spartanburg and Gastonia.

⁸³ Fetters and Swanson, op. cit., p. 45.

good faith with the Transportation Act of 1920,⁸⁴ the Piedmont & Northern filed a formal application for a "Certificate of Convenience and Necessity" with the Interstate Commerce Commission on March 26, 1927.⁸⁵ Meanwhile, however, the Southern had gotten wind of the P&N's plans to expand, literally along its spine through a region in which it was the dominant carrier, and promptly registered its formal opposition. What followed was a year of legal wrangling that culminated in a split decision by the ICC on April 14, 1928, denying the P&N's request on the grounds that existing railroads (i.e., the Southern Railway) already provided adequate service in the region and that the P&N could no longer be considered an electric interurban, but rather had become an electrified Class I railroad.⁸⁶ The P&N appealed these findings to the U.S. District Court, which denied a hearing on the grounds that the federal courts had no jurisdiction in the matter. The P&N appealed again, this time to the U.S. Supreme Court, which also denied a hearing on the same grounds.⁸⁷ The P&N then began construction on the Spartanburg-Gastonia line, whereupon the ICC requested an injunction to halt construction. Ironically, considering its foregoing legal posture, the Federal District Court granted the injunction and work had to be stopped. The P&N appealed yet again, but in what was to prove a precedent-setting ruling,⁸⁸ the Supreme Court upheld the injunction in 1932 and the definition of the railroad as an electrified Class I instead of an interurban:

The petitioner's railway is of such importance in interstate commerce and renders a service so predominantly devoted to the handling of interstate freight in connection with steam railroads, is in such relation to connecting steam carriers, and competes with steam trunk lines in such manner, that, in view of the declared policy of the act, we cannot hold it an "interurban" railway within the exemption of the same paragraph.⁸⁹

⁸⁴ The act actually did not require an electric *interurban* to obtain permission of the ICC before expanding; thus, had the railroad *not* filed, the ICC might not have been able to prevent the expansion for lack of jurisdiction.

⁸⁵ Fetters and Swanson, *op. cit.*, p. 47.

⁸⁶ Id.

⁸⁷ Piedmont & Northern Ry. Co. v. United States et al., 280 U.S. 469. (1930).

⁸⁸ Fetters and Swanson, op. cit., p. 47.

⁸⁹ Piedmont & Northern Ry. Co. v. Interstate Commerce Commission, et al., 286 U.S. 299. (1932).

After six years of appeals, the railroad's management called a halt to the expensive legal battle, forever closing the door on dreams of expansion and on the very practical desire to connect physically the opposite ends of the road.

Throughout the 1920s, passenger revenue continued to fall off in response to the rise in popularity of the automobile. Company records show that the average number of riders per train increased steadily from fifty-two in 1914 to an all-time high of seventy-five in 1918, after which time it entered a precipitous decline, to an all-time low of just fourteen by 1929.⁹⁰ Freight and express revenue, however, continued to increase during this time.⁹¹ Also at this time, Duke Power Company completed the first of several new large power plants which the P&N would be responsible for feeding with daily coal runs.⁹² By 1929, more than ninety-six percent of the railroad's total revenue came from freight service.⁹³ The railroad faced the approaching depression in excellent health; and, although much of that would obviously evaporate over the next several years, the railroad remained in much better financial shape than its competitors.⁹⁴ In fact, ridership actually increased as the effects of the Depression made owning and operating an automobile more difficult.⁹⁵ At no time in its approximately sixty-year life did the railroad have to consider or suffer bankruptcy, nor did it ever have to borrow money to finance its operations or maintenance.⁹⁶ It was at this time that the injunction imposed on the railroad's expansion actually became an asset; funds set aside for construction plans placed the road "in an especially

⁹⁰ Piedmont and Northern Railway Company, statement of passenger train operation, 1914-1929. Manuscript Collection No. 16, Atkins Library, University of North Carolina at Charlotte.

⁹¹ Fetters and Swanson, *op. cit.*, p. 49.

⁹² *Ibid.*, p. 51.

⁹³ *Ibid.*, p. 53.

⁹⁴ *Ibid.*, pp. 53-55.

⁹⁵ *Ibid.*, p. 59. Passenger revenue actually tripled between 1931 and 1934, even though the railroad had cut its fares to one cent per mile.

⁹⁶ *Ibid.*, p. 63.

strong cash position,"⁹⁷ and much of the surplus was paid out to stockholders at eight dollars per share, as opposed to the pre-Depression four dollars.⁹⁸ The road even managed to turn a profit in 1932, and earnings steadily increased throughout the 1930s.⁹⁹

In 1930, the P&N, the Atlantic Coast Line, and the Clinchfield Railroad organized the Spartanburg Tunnel Company and began seeking permission to construct an interchange track under the Southern Railway. The P&N's northern terminus, along with ACL facilities, lay to the south of the Southern Railway main line, while the southern terminus of the Clinchfield lay to the north. Traffic was exchanged between the three railroads by the Southern Railway over a half mile of its track, a magnanimous favor for which the Southern charged the maximum transfer and interchange rates allowable 100 – in other words, as if they had shipped it several hundred miles instead of simply across the street. The proposed tunnel would be roughly 750 feet long and would involve extensive re-grading of the lines involved. The Southern Railway strongly objected to the project, insisting that a tunnel would make its roadbed unstable, threatening the operation of its trains and the safety of its crews. The Southern further claimed that eliminating its "shuttle" would force them to fire several clerks and train crews who handled the transfers.¹⁰¹ It is enough to make one wonder if perhaps an errant remark from James Duke at a social gathering some years earlier might have burned the wrong ear. The case went to the courts, where it stayed for thirty years as the companies waged a legal battle of attrition.

Meanwhile, the 1940s and World War II lifted the entire nation out of the Depression for good, and more mundane but immediate concerns commanded the railroad's attention. At the start of the decade it replaced almost all of is aging eighty-pound rail with new one hundred-

⁹⁷ *Ibid.*, p. 63.

⁹⁸ Id.

⁹⁹ *Ibid.*, pp. 61-62.

¹⁰⁰ *Ibid.*, p. 137.

¹⁰¹ *Id*.

pound rail.¹⁰² The P&N continued to face rising freight demands as the war saw an increased demand for the textiles produced in the region; in 1944 alone, the railroad hauled a record 2,745,000 tons.¹⁰³ Once again, it was time for more locomotive power. With the River Junction Shops busy keeping up with wartime demands, the railroad turned to an outside source for the first time in thirty years.¹⁰⁴ No. 5611 (Fig. 2.12) was built by General Electric at Erie, Pennsylvania, and was a clean, welded steel design delivered in early 1942.¹⁰⁵ It is a significant testament to the engineering and mechanical skill of the P&N's shops that a corporate giant like General Electric patterned their model after the little railroad's "home made" engines; for, although the body of the new locomotive may have looked a tad sleeker with its rounded corners, it was in every mechanical way almost identical to Master Mechanic Noblett's articulated B-B+B-B units.¹⁰⁶ Like his, the new unit "was considered an outstanding example of contemporary electric locomotive design."¹⁰⁷ Passenger service also enjoyed another brief boom as wartime rationing limited automobile use,¹⁰⁸ with revenue reaching a nineteen-year high in 1943.¹⁰⁹ It was during the war that the express service, which the railroad had always offered, reached the height of its popularity, with ten express trains per day scheduled on the North Carolina division and eight per day on the South Carolina division (Fig. 2.13).¹¹⁰

Of course, as soon as the war was over, passenger traffic quickly waned again, plummeting to its lowest point of \$25,000 in tickets sold for the year 1950.¹¹¹ It would not be long before passenger service on the P&N became a thing of the past. Other big changes were

- 103 *Id*. ¹⁰⁴ *Ibid.*, p. 74.
- ¹⁰⁵ Id.
- ¹⁰⁶ *Ibid.*, p. 74 and p. 163.
- ¹⁰⁷ Id.
- ¹⁰⁸ *Ibid.*, p. 76.
- ¹⁰⁹ *Ibid.*, p. 83. ¹¹⁰ Id.
- ¹¹¹ Id.

¹⁰² *Ibid.*, p. 75.

gathering momentum as well. In 1949, the company's last electric locomotive, No. 5612 (Fig. 2.14), was extensively rebuilt from No. 5600 (originally purchased in 1918) at the company's River Junction shops. No. 5612 was a monster; it was the largest and most powerful electric locomotive ever built, or purchased, by the P&N. Weighing 252,850 pounds, its eight 300-hp General Electric 212L motors produced 75,000 pounds of tractive effort. It was heavier and more powerful than the American Locomotive Company (ALCO) RS-3 diesels that succeeded it and almost as heavy and powerful as their successor, the ALCO C-420. No. 5612 saw service hauling heavy coal trains to Duke Power Company plants on the North Carolina division, a duty which it would not perform for long.

The railroad had been established as an electric passenger line, but by 1950 it was clear that passenger business on the P&N, as on railroads across the country, could not be affordably maintained. Further, the overhead power distribution system was showing its age. Undertaking the extensive upgrade that would be needed to maintain safe and efficient standards was both costly and questionable, and in early 1950 railroad president William Ivy Rankin recommended a fundamental change in the railroad's identity: abandoning passenger service and converting to diesel motive power.¹¹² The P&N purchased ten 1,600 horsepower road switchers (RS-3s) from ALCO and simultaneously filed applications with the public utilities commissions of North and South Carolina for system-wide release from passenger service obligations.¹¹³

The first diesel locomotives to be delivered, initially numbered 100 and 101 (Fig. 2.15), arrived at Spartanburg before the year was out and were put into service immediately on distance freights to Greenwood.¹¹⁴ Passenger service was concluded on the North Carolina division at approximately 7:00 p.m. on February 28, 1951, as engineer V.J. Rogers and conductor J.H.

¹¹² *Ibid.*, p. 127.

¹¹³ Id.

¹¹⁴ *Id*.

Whitlock came to a stop at Gastonia.¹¹⁵ In South Carolina, there were actually two "last runs:" No. 4 (Fig. 2.16) north from Greenwood to Spartanburg and No. 5 south from Spartanburg to Greenwood. The two trains made their last scheduled meet at "Brandon," just south of Greenville, South Carolina.¹¹⁶ On the southbound train, engineer E.E. Sanders and conductor C.P. Burriss were the two senior-most operations personnel employed by the railway; they had been P&N employees since 1912 and partners for forty years. For the sake of record-keeping, however, No. 4 was officially designated as the "last run." Consisting of Southern Car Company No. 2102 (built in 1914) and the *Carolina*, No. 4 pulled to a stop at the Spartanburg station "shortly after 5 p.m. on October 31 [1951],"¹¹⁷ and passenger service on the P&N was over.

The Korean War raised the market price of copper scrap, hastening the P&N's dieselization, and within weeks of the last passenger runs the Hyman-Michaels Company of Chicago was at work dismantling the overhead catenary. The South Carolina division was the first to be completely converted,¹¹⁸ with Master Mechanic Noblett directing the transition in equipment and skill in the River Junction Shops from 1951 to 1953.¹¹⁹ In November 1953, the railroad placed another order with ALCO for six 1,000 horsepower switchers (S-4s, Fig. 2.17). These were numbered 1000 through 1005, after their horsepower rating, and the previously delivered RS-3s were renumbered 1600 through 1609, after theirs.¹²⁰ By May of 1954, both divisions had completely converted to diesel power, except for a short stretch of electrified track that ran down the middle of Mint Street in Charlotte and thus would not support the weight of

¹¹⁵ Lynch, Thomas G., ed., Semaphore, March, 1951, p. 12.

¹¹⁶ *Id*.

¹¹⁷ Lynch, Thomas G., ed., *Semaphore*, November, 1951, p. 7; Fetters and Swanson, *op. cit.*, pp. 129-130.

¹¹⁸ Fetters and Swanson, *op. cit.*, p. 130.

¹¹⁹ Lynch, op. cit., p. 7. Noblett retired in 1956 after forty-two years as a P&N employee.

¹²⁰ Fetters and Swanson, op. cit., p. 130.

120-ton diesel locomotives. Two electric units, the last in service on the road,¹²¹ continued to work this industrial spur for four more years, until a joint effort between the railroad and the city relocated the line to get the trains out of the street. On May 21, 1958, the overhead "cat" was completely turned off for the first time in almost fifty years.¹²²

The 1960s dawned with the successful conclusion of the Spartanburg Tunnel dispute after thirty years of protracted legal contest.¹²³ Like the extension battle before it, the case had made its way to the U.S. Supreme Court, which handed down its ruling favoring the Tunnel Company late in 1961.¹²⁴ The railroads involved quickly got to work on construction, and the first train rolled through the single-track tunnel in July, 1963.¹²⁵ The interchange was a manually tripped interlock, set by default to lock out (or stop) all trains. Only one train could enter the block at a time and had to key itself out on the other side to open the block again. The project, long in coming to fruition, nevertheless greatly reduced the time and expense of interchanging traffic between the respective freight companies.¹²⁶ It was particularly helpful to the P&N because the coal it delivered to the Duke Power plants in South Carolina came, almost exclusively, over the Clinchfield Railroad and entered the P&N system at Spartanburg.

President Rankin retired in 1964 and was succeeded by Franklin Way, who had come to the P&N in 1951 from its sister company, the Durham & Southern, another Duke railroad. Way would preside over the final years of the P&N. The railroad undertook its last major construction project in the mid-1960s, when Duke Power built an enormous plant on the Catawba River in North Carolina, necessitating a twenty-four-mile track extension. Fueling the

¹²¹ One of the two, No. 5103, was restored by the railroad and donated to the Atlanta chapter of the National Railway Historical Society (NRHS) in 1963. It now resides at the North Carolina Transportation Museum in Spencer, N.C., and is the sole survivor of its heritage.

¹²² Fetters and Swanson, op. cit., p. 135.

¹²³ *Ibid.*, p. 137.

¹²⁴ Id.

 $^{^{125}}Id.$

¹²⁶ *Ibid.*, p. 138.

coal plant with 320 trains per year prompted the P&N to purchase two new ALCO locomotives, 2000-horsepower C-420s numbered 2000 and 2001 (Fig. 2.18). These were the last locomotives purchased by the railroad and were delivered to the South Carolina division in December, 1965. The familiar forked-lightning herald was replaced on these units by a yellow, black, and white diamond logo. Along with them, two of the S-4s were transferred to South Carolina in exchange for five RS-3s, which would work the coal trains on the new branch line in North Carolina.¹²⁷

As 1965 came to a close, the Piedmont and Northern was healthier and more profitable than it ever had been. However, Duke Power President W.B. McGuire approached P&N President Way at the end of that year and informed him that the company interests wanted to divest themselves of their stock holdings, which amounted to roughly forty percent of 250,000 shares.¹²⁸ Simply dumping this much stock would have been catastrophic. Way, a former employee of the Seaboard Air Line Railway, met with SAL president John W. Smith to discuss the possibility of a merger. The Seaboard was the best choice as it connected with the P&N at both Charlotte, N.C., and Greenwood, S.C. Although Smith was interested, the Seaboard was then in the midst of negotiations and a legal battle to merge with the Atlantic Coast Line. The Seaboard Coast Line merger was approved in the middle of 1967, and talks between the P&N and SCL were resumed in October. The two roads applied to the Interstate Commerce Commission on December 20.¹²⁹

It should come as no surprise that the loudest voice of opposition to the merger came from the Southern Railway. In a dispute not unlike the recent Conrail split, the Southern first demanded that it be allowed to acquire the P&N's South Carolina division. It then "offered" to buy all of the P&N and then sell everything but the South Carolina lines to the Seaboard Coast

¹²⁷ *Ibid.*, p. 141.

¹²⁸ *Ibid.*, pp. 141-142.

¹²⁹ *Id.*

Line (SCL) in separate negotiations. The Clinchfield Railroad (and also, subsequently, the Greenville & Northern) intervened to support the merger between the P&N and SCL.¹³⁰ After review, an ICC examiner denied the Southern's petition in September, 1968. Subsequent protests were also rejected, and the final notice of the ICC was given May 13, 1969. Resolutions of acceptance were passed quickly by the boards of the P&N and the SCL, and on July 1, 1969, the P&N rolled into history.¹³¹

At the time of its absorption into the Seaboard Coast Line, the Piedmont & Northern was classified as a Class I shortline (dieselized, freight-only) operating over approximately 280 miles of track, 112 of which was main line. It owned eighteen locomotives, eight cabooses, and employed around 350 people. In North Carolina, four daily round trips ran between Charlotte and Pinoca and two between Pinoca and Gastonia, in addition to the unit coal trains hauled to the new power plant. In South Carolina, there were twenty round trips per week between Spartanburg and Greenwood plus one round trip per day (except on Sunday) on the Anderson Branch. Between October 1966 and September 1967, the P&N interchanged more than 122,000 carloads of freight, and revenue was at an all-time high at almost \$6.8 million. Coal alone accounted for forty percent of the income, with the remainder coming from cotton, foodstuffs, and textile products. The road consistently had one of the lowest operating ratios in the country.¹³² It had been ably led and ably run. It had always sought to provide the best service in a region it was committed to improving. In its own shops, it had produced some of the finest examples of electric locomotives ever built. It had never filed bankruptcy; it had never borrowed to cover its operating and maintenance expenses – all this from a company that had been nearly

¹³⁰ *Ibid.*, p. 143.

¹³¹ Ibid., pp. 144-145.

¹³² *Id.*

120

run into the ground during World War One, never been permitted to expand competitively, and which had never carried more than 500 people on its payroll at any given time.

Overall, the merger was a wise course of action for the P&N – probably the only course of action, in light of the impending stock sale. Certainly it was better that the shareholders receive one and a half shares of Seaboard Coast Line stock than hold onto one share of stock seriously undermined in value by the sale of 250,000. The P&N's employees seem to have gotten a fair amount of protection in the merger as well. Fortunately, the wolf did not get into the fold, and the P&N became a highly profitable part of the Seaboard Coast Line. SCL itself fared well, later evolving into CSX Corporation. Coal is still regularly delivered to Duke Power's "Plant Marshall" on the Catawba River over rails laid (metaphorically, at least) by P&N hands.

Recent safaris in the wilds of rural South Carolina reveal that the P&N main line from Honea Path south to Greenwood has been taken up. Where trains used to rumble past farms with cedar-lined barbed wire fences and behind yards dotted with dogwoods, magnolias, and camellia bushes, and where engineers used to wave to barefooted children, and where generally everyone was on a first-name basis with everybody else, one now finds the void left by the railroad's disappearance. The telltale signs that it was once there are present in the form of overgrown cuts, raised earth banks with the dirt packed hard as concrete from years of supporting weight and speed, sandy swaths of earth that appear wider and flatter than originally required by Mother Nature.

The disappearance of the railroad is perhaps not all bad; Greenwood now features a park and open space on the site of the P&N yard there. But what the visitor notices about the area is a general decline in transportation networks. In 1909, as States Lee and James Duke were considering the plans for the railroad, one observer commented about the region that

A lack of satisfactory transportation compounded [its] problems, for while there was some railroad service, much of it was "jest passin' through" on the way from Washington to Atlanta, New Orleans, or Savannah.¹³³

This description could be applied to the current state of Piedmont transportation, which is once again concentrated into a few corridors serving major metropolitan areas hundreds of miles apart. Local lines have been abandoned (the entirety of the Ware Shoals Railroad, for instance), casual victims of the trend towards regional centralization and urbanization which continues to be so prevalent in the South.¹³⁴ Big cities are getting bigger and small towns are getting smaller. There are places to which people are moving, but more places from which they are moving away. Traces of the Seaboard, Southern, and Atlantic Coast Line stations (and the latter two railroads themselves) in Greenwood have been so thoroughly erased that one would hardly know they had ever been there. An occasional CSX freight will blast through town, there and gone in under two minutes, and then the quiet breathing of the small city returns, undisturbed. Once again, it seems, most of the area's railroad traffic is "jest passin' through."

¹³³ *Ibid.*, p. 10.

¹³⁴ The railroads, too, are more centralized. A news item in the November, 1956, issue of *Semaphore* stated that "In 1860, there were 464 railroads operating in America, and of that number only 16 are still operating under the names listed nearly 100 years ago. Most of the 464 then in existence have been consolidated into larger lines." Today, almost fifty years after that was printed, just *one* of the sixteen remains under its original name – Union Pacific. Furthermore, railroads have distanced themselves, some of them intentionally, from the popular ideas of what it is they do; consistent with modern English's addiction to euphemisms, they represent themselves today as "transportation companies." "CSX Transportation," for example, the corporate roof under which the old P&N now resides, is a name in which "C" and "S" are loosely descended from "Chessie System" (which, in turn, was an approximation of Chesapeake & Ohio and Baltimore & Ohio), the "X" designates nothing in particular, and the emphasis falls upon "transportation," a word considerably less precise than "railroad."

ILLUSTRATIONS



Figure 2.1: A P&N electrical substation. Fetters and Swanson, p. 18.



Figure 2.2: Interior view; electrical equipment. Fetters and Swanson, p. 18.



Figure 2.3: The callbox of P&N's Westinghouse semaphores. Fetters and Swanson, p. 32.



Figure 2.4: A P&N freight waits at a non-permissive signal. Fetters and Swanson, p. 25.



Figure 2.5: Even though the semaphore is pointed down (hence the name "lower quadrant"), indicating the train leaving McAdenville is clear to proceed, this shot may have been posed: both trolley poles are up – not a typical practice since only one was needed to power both cars. Fetters and Swanson, p. 32.



Figure 2.6: Steeplecab No. 5000. For some reason, Westinghouse artists changed "5000" to just "5" in this publicity photo. Note the brakeman casually standing on the boxcar roof (as was necessary to reach the brake wheel, just visible to his left) – within an arm's length of 1,500 volts. Fetters and Swanson, p. 28.



Figure 2.7: Boxcab No. 5103 after its restoration. Fetters and Swanson, p. 171.



Figure 2.8: Jewett-built interurban car, or "motor," No. 2000, as it appeared in an advertising leaflet for Westinghouse Electric. Fetters and Swanson, p. 22.



Figure 2.9: Southern Car Company express motor No. 4000 (right) appears with Jewett-built No. 2000 (left) in a builder's type photograph (again, both trolley poles are up) of the "class leaders" as delivered in their maroon and gold livery. Fetters and Swanson, p. 24.

Figure 2.10 (following page): A 1923 Rand-McNally map showing spindles located along the P&N.





Figure 2.11: The P&N's "builder's photo" of No. 5600 shortly after its conversion from a 4000-class express motor in 1918. Noblett's first engine of this type was number 5500, built in 1917, which was identical except for having slightly less horsepower. No. 5600 was later rebuilt yet again as No. 5612 (Figure 2.14, below). Fetters and Swanson, p. 35.



Figure 2.12: This General Electric unit was based on Fred Noblett's extremely successful design. Fetters and Swanson, p. 74.



Figure 2.13: Express service was always a vital part of the P&N's income. Here, the expressman loads a heavy package onto express motor No. 2101 at Lyman, South Carolina. Note the other parcels just inside the freight door. Fetters and Swanson, p. 77



Figure 2.14: What had started out in 1911 as an express motor had become articulated locomotive No. 5600 (Figure 2.11, above) in 1918. In 1949 it was rebuilt a second time as No. 5612 – the largest and most powerful electric locomotive the P&N ever operated, shown here, appropriately enough, delivering coal to the equally robust River Bend powerplant on the North Carolina division. Fetters and Swanson, p. 94.



Figure 2.15: The long and the short of Ivy Rankin's 1950 address to P&N stockholders was that the railroad needed to make a transition to diesel locomotives. Shown here presenting their long and short hoods are the first two units to be delivered, ALCO RS-3s Nos. 100 and 101, as they looked upon their arrival. They subsequently acquired black and white pilot "safety" stripes, chrome yellow pin stripe trim, and P&N lightning bolt heralds under the numbers on their cab windows.



Figure 2.16: The last goodbye. Engineer Aaron Campbell (steps) and Conductor W.R. Adams with Train No. 4, the officially designated "last run" of P&N passenger trains (not pictured, the *Carolina*'s porter, Miles Staggs) on October 31, 1951. Fetters and Swanson, p. 130.



Figure 2.17: It may look as if S4s 1005 and 1001 are running backwards as they trundle through the red clay country of North Carolina, but in fact the P&N often operated these units this way. The improvement in visibility for the crew was tremendous and much more like they were used to seeing after operating electric locomotives for so many years. Fetters and Swanson, p. 133.



Figure 2.18: The last two locomotives purchased by the P&N were 2000-horsepower ALCO C-420s delivered in December of 1965, Nos. 2000 and 2001. For the first time, the lightning bolt herald disappeared and a new white and chrome yellow diamond logo replaced it. Photo from http://www.rr-fallenflags.org/

CHAPTER THREE

SURVEY OF PIEDMONT AND NORTHERN STATIONS

(Illustrations provided in Chapter Five.)

GENERAL CHARACTER

Piedmont and Northern Railway stations generally adhered to either of two standard plans designed by Charlotte architect Charles Christian Hook about 1911.¹ Construction work on the North Carolina Division was contracted to the J.A. Jones Company of Charlotte. One version was used primarily in larger urban areas: Charlotte and Gastonia, North Carolina, and Spartanburg, Greenville, Anderson, and Greer, South Carolina. The basic plan for stations of this type consisted of a square, two-story main block with a hipped roof and a long single-story appendage extending from one side. The two-story block housed administrative railroad offices and dispatchers; it also included a basement. The single-story end was used for freight storage and transfer. In design, stations of this type were virtually identical, but owing to their construction in downtowns, also were likely to exhibit unique modifications needed to fit preexisting site conditions. Another consequence of their situation in urban centers is that today there are only two remaining. The second basic station plan was used for stations in smaller communities, and there was very little difference in each; Belmont, North Carolina, is a notable exception. The actual construction work for all stations was carried out by a combination of local contractors and the railroad's own personnel.

¹ Morrill, Dan L. et al, "The Thrift Depot of the Piedmont and Northern Railroad Company." Report submitted to the Charlotte-Mecklenburg Historic Properties Commission, October 1, 1982.

Regardless of which design was used, all of C.C. Hook's P&N stations had in common their color, architectural details, and choice of building materials. Further, all of them appear to have been intended as combination depots housing both passenger and freight business in one building. Each consisted essentially of the joining together of two sizeable sections and one connecting space: the freight warehouse, the passenger waiting area, and the station agent's office. It would be stretching things quite a bit either to describe these sections as mere "components" or to categorize the buildings as truly "modular" (they were not kits; nor were they assembled from pre-fabricated sections); however, they are similar in concept in that they join together three use-specific spaces, somewhat varied in size and arrangement to fit given sites and traffic requirements, into a uniform overall form. In the somewhat misappropriate terminology of today, they might be said to have been built from a "scalable" design.

CHARLES CHRISTIAN HOOK

Most Piedmont and Northern stations were designed by Charlotte architect Charles Christian Hook.² Hook was born in Wheeling, West Virginia, in 1870 to German immigrant parents. He graduated from Washington College in 1890 and was hired by prominent Charlottean and Superintendent of Schools, Dr. Alexander Graham, to teach mechanical drawing. It is perhaps partly through his association with Dr. Graham that Hook gained access to lucrative design contracts for some of Charlotte's other leading citizens; for, although he apparently never had any formal training as an architect, he began his career just two years later, and one of his first projects was designing houses for Edward Dilworth Latta's new residential neighborhood, to be called Dilworth. Dilworth itself was a product of the streetcar age and of the revolutionary convenience of electricity, which allowed people to move out of the center of

² Morrill, Dan L., *op cit*.

town in large numbers, and it was the first such "streetcar suburb" to be built in North Carolina. More than thirty of Dilworth's grand residences are attributed to Hook, and this would have no doubt further increased his reputation in a conservative town. Also, in keeping with the ideals of the "City Beautiful" architectural trend, Hook seems to have been willing to put aside personal artistic expression for designs that appealed to his august clients, for his work includes a variety of architectural styles.

By 1902, Hook had become partners with Frank McMurray Sawyer in the firm Hook & Sawyer and had already accumulated clients from outside Charlotte, particularly from other communities in the Piedmont geographical region of North and South Carolina, including Durham, Greensboro, High Point, Salisbury, Davidson, Spartanburg, and Greenville. His projects from this time include residences for numerous leading men of the day, including James Buchanan Duke (American Tobacco, Southern Power Co.), Zebulon Vance Taylor (Southern Power), Abel Caleb Lineberger (textiles), William Henry Belk (Belk's department stores), and Egbert Barry Cornwall Hambley (an English mining expert, hydroelectric power entrepreneur, and founder of the North Carolina Power Company). Hook's social connections flourished; he served as president of the Charlotte Chamber of Commerce and was active in civic organizations such as the Knights of Pythias and the Red Cross. His wife and business partners (after working with F.M. Sawyer, he subsequently formed a partnership with Willard Rogers) may have been well-connected also. Even if it was not their first meeting, it is likely that his design work for James Duke's residence also earned him consideration when Duke needed an architect to design stations for his railroad.³

³ Hankin, Lisa Bush, "Charles Christian Hook." http://www.cmhpf.org/personalities/CCHook.html. July 22, 2004.

ARCHITECTURAL DESCRIPTION

Choosing the right design. The P&N probably utilized a "combination" depot (where passenger and freight areas shared a single building) because, particularly by the 1910s, it was a proven design that all railroads had found to be ideally suited to both the freight and passenger needs of small to medium-sized urban areas. Railroads found that the combination depot worked quite well in these situations because it was a design which easily lent itself both to the railroad's logistical needs and to the public's expectations, as long as neither was too demanding of one building. For traveling society, the vernacular combination depot lent itself well to the social customs of the day. As long as the building "looked" like a depot, it was usually enough to satisfy the more discerning eyes among small-town populations; it could be aesthetic but did not have to be a work of art (though of course many were). A few modest flourishes, such as cornice brackets, were often sufficient to dress up a form that most people already expected to follow its utilitarian function. There were separate entries and interior spaces to accommodate passengers, employees, freight, and baggage, and as automobiles became popular and city street networks were expanded and improved, the longitudinal combination station fit neatly into city blocks and alongside streets and tracks alike.

From the railroad's point of view, too, the vernacular combination depot was ideal. They could build multiple copies from the same standard plans, adapted to suit the requirements of a particular site, and, best of all, they were not particularly expensive to build. Another advantage was that, in terms of train operation, combination stations were "fast." Trains could arrive and depart as quickly as possible and with minimal opportunities for delay to creep into the schedule. It was easy to load and unload on the track nearest the platform (the "station track") on a through-track plan. There was no need to reverse into or out of the station; all that was needed

were two sections of crossovers and signals - one some distance from each end of the platform, to allow a train traveling on the outside track to cross over to the station track and back out again Further, the combination depot favored the linear nature of loading and after departure. unloading relatively short trains because people could board or disembark at opposite ends of multiple cars while baggage and express freight was loaded and unloaded separately further down the platform. The trackside combination depot did *not* work particularly well for handling longer trains, the diners and sleepers of which were a bit more demanding, logistically. Another complication was that with longer trains, while passengers could be loaded and unloaded at the front of the train, those in the rear would still be waiting – sometimes a block or more away from the platform, thus requiring the train crew to actually make two stops; after loading and unloading the front, the train would have to be pulled forward and stopped again to repeat the process for the rear. This practice, while not at all unusual, was most definitely not preferable, either for the passengers or the railroads. It would not have been a contingency for the P&N, however, since typically its passenger trains consisted of only one or two cars, and certainly not more than four or five⁴, so the through-track combination station worked quite well in most situations.

As is often the case with small companies in direct competition with corporate giants, the small company, which could not possibly compete successfully on the basis of price or volume, nevertheless can usually enjoy an advantage when it comes to meeting the customer service needs and expectations of a *local* market. The logistical and bureaucratic organization of a small railroad is almost infinitely more flexible than that of a larger one, and to a great extent the "short line" railroad is able to shape its equipment purchases, facilities construction, manpower

⁴ Piedmont and Northern Railway Company, statement of passenger train operation, 1914-1929. Manuscript collection No. 16, Atkins Library, University of North Carolina at Charlotte.
requirements, operations schedules, and even (to the extent that federal regulation allows) rates around the needs of the communities and customers it serves, rather than forcing them to fit into a generic mold (one old short line proverb runs, "When you need it on time, ship it on the short line").

The freight agents, for instance, can take each customer on a case by case basis and ask the management, "What do you need? How can we best serve you?" rather than "Here is what we have to offer if you think you can use it." That characterization is overly simplified, of course, but for its success (even for its survival) the Piedmont and Northern most definitely depended on customer service of that nature; and, although some areas were served only by a roofed platform at a designated grade crossing, the most prominent display of the railroad's slogan, "Service with Courtesy," was its construction, wherever possible, of attractive and relatively substantial stations even in the smallest of the communities it served.

Furthermore, because the P&N was an interurban and was connected, both physically and corporately, to all of the trolley lines along its right of way, the bulk of its passenger business was formed by carrying local riders from local points of origin to local destinations – mill workers traveling to jobs, ladies going to uptown shops, children going to visit family, friends setting off on weekend outings to baseball games. None of these riders (and that is a better term than "travelers") required transportation of a regional sort; most made trips of nothing more than a few miles. Anyone riding the P&N who was bound for Washington, Atlanta, or points beyond would have been riding to make a connection with a larger railroad at a city like Charlotte, Spartanburg, Greenville, Anderson, or Greenwood. The longest trip possible on the P&N would have been between Spartanburg and Greenwood, South Carolina, a distance of approximately one hundred miles; and, while through trains were regularly scheduled between those two points,

it is unlikely that the majority of passengers aboard required traveling the entire distance. In comparison to the "big railroads," which served a much larger region, handling passenger operations was a much simpler prospect for P&N managers and was easily tailored to fit the "low-volume" passenger demands of a sparse rural population.

Freight service, on the other hand, required some inherent ability to handle traffic on a regional scale. Freight has always been the real bread and butter for railroads, and the P&N was no exception. As discussed above in Chapter Two, by the time of the railroad's merger with Seaboard Air Line, coal to fuel local powerplants constituted the bulk of the railroad's freight business. Even from the beginning, however (i.e., when the railroad's founders were planning stations around anticipated traffic volume), it would not have been much of a factor in freight operations as far as stations were concerned, for while all of that traffic originated off-line, after arriving at a given yard most of it was hauled directly to the plant. This would have been true especially after the Depression and World War II, by which time coal had mostly ceased to be used as fuel in homes. Prior to that, many communities featured "Ice and Fuel" companies, which procured coal for sale to homeowners and local businesses (in the same way that dairy companies once operated). Coal would have been shipped directly to those companies as well.

Similarly, a significant portion of the P&N's total freight volume took the form of "overhead traffic."⁵ Overhead traffic, better known as bridge traffic, is all the traffic that neither originates nor terminates on the railroad carrying it. In other words, the railroad acts as a "bridge" between two (or more) otherwise separate railroads and profits by speeding the transfer of goods back and forth between them.⁶ It is not quite the same as a "middle man" but the idea is similar. A short but important bridge route can be an extremely lucrative one; the railroad has

⁵ Lynch, Thomas G., ed., *Semaphore*, Vol. 7, No. 11; Charlotte, N.C., December 1951, p. 4. ⁶ *Id*.

maximum opportunity to make a profit on minimal overhead costs, especially if the route is a valuable one between busy markets. One of the ways in which the Piedmont and Northern flourished was by providing three major railroads and several lesser ones with fast, safe, and efficient access to each other. It hauled raw materials from the Seaboard Air Line in Greenwood north to Spartanburg, where it passed them off to the Clinchfield in exchange for finished goods manufactured in the upper Midwest and bound for markets in Georgia and Florida. These it hauled back to Greenwood. With the Southern Railway as the dominant carrier in the region, the P&N profited from the arrangement by helping to form a group with enough collective strength to compete with Southern. Speed was essential to the success of this arrangement: P&N trains were scheduled to depart as soon as cars were received and scheduled to arrive in time to forward them on to the next carrier.

To compete... coordinated schedules are maintained by the C&O, N&W, and Clinchfield between Spartanburg and important junctions such as Cincinnati, Columbus, Chicago, and Toledo. In a like manner the P&N, G&F [Georgia and Florida], and Seaboard maintain... coordinated schedules between Spartanburg and important Southeastern points such as Atlanta, Augusta, Savannah, Birmingham, and Jacksonville.

Since there are several alternate routes for overhead traffic which the P&N handles, the Traffic Department has to scramble for the business. Thus it has become paramount that the P&N handle its overhead traffic reliably and expeditiously. Good service – made possible by an efficient operating department – is the traffic representatives' best selling point. One of the most important functions of the railroad's off-line traffic representatives is to develop this overhead traffic and make certain that shippers get the service which they are due.

All in all, overhead – the freight kind – is a mighty fine thing for a railroad to have and many of the P&N's freight operations are tailor-made for this type of traffic.⁷

As far as P&N stations were concerned, bridge traffic did not affect them much. Like coal, it

was routed directly from the source railroad to the destination railroad, with little need to involve

local stations apart from the agents at each end of the route.

⁷ *Ibid.*, p. 5.

Apart from coal and bridge traffic, a significant portion of the Piedmont and Northern's freight revenue was supplied by the textile industry. Raw cotton and finished textile products, as well as chemical products (bleaches, dyes, etc.) to support the textile industry, played into both local and regional freight traffic. That is, shippers and receivers were present both "on-line" (served directly by the P&N) and "off-line" (served by the P&N via other railroads). Cotton, for instance, might originate locally and be delivered to a local mill for production, but the finished textile product could go literally anywhere in the continental U.S. Piedmont and Northern boxcars carried this cargo across the entire country and returned to the system with other goods not locally available.

In addition, the P&N existed at a time when a large amount of miscellaneous freight (especially parcels) was circulated locally, much more than today. It must be remembered that there were no UPS or Fed-Ex companies, no air freight services, and the United States Post Office contracted all of its long-distance deliveries, both mail and parcels, out to railroads. It must be borne in mind, also, that railroads excel in delivering heavy freight and in bulk, and that over time this has produced a trend in how railroad shipping is conducted. Specifically, that trend has been a general move away from widely dispersed, low volume shippers and receivers in favor of fewer, more centralized, and higher volume customers, as well as a tendency toward large (even vast) central gathering, classification, and dispersal points on the railroad. Ample evidence of this exists in the form of countless small early twentieth century factories and warehouses, some vacant or derelict, others perhaps enjoying adaptation to other uses, with their overgrown and abandoned industrial sidings, which are easily found along railroad rights of way (some of which are themselves now abandoned) in the midst of almost every small to medium-sized urban area.

The Piedmont and Northern operated, though, at a time when there was much more of what is called, in railroad parlance, "less-than-carload" freight business that could be tapped for profit. That is, a substantial amount of the freight any railroad hauled would have taken the form of numerous small, individual orders which might be regularly scheduled but which more often were of the occasional sort, and essentially none of which was large or routine enough to require the use of an entire car, nor to necessitate the construction and maintenance of a dedicated spur serving a modest customer's needs.

For instance, the farmer ordering a new plough from the manufacturer (again, this was before the advent of gigaplex chain stores in every community), the local feed mill ordering a new belt for its steam driven machinery, the local newspaper ordering paper for the printing press – even the press itself – each of these customers and the manufacturers supplying them might have their orders shipped through their respective freight offices. Orders might or might not ship on the same car, but either way the freight station ("depot" in the true sense of the word) served as the central point for collecting and distributing orders of this size. The supplier would drop off his shipment at the local freight office, which would route it (sometimes over multiple railroads), and a similar freight office at the other end would notify the receiver upon its arrival; to that depot he would go to claim it and to pay the railroad for its delivery - not unlike today when someone who has missed delivery of a package must trek to the UPS or Fed-Ex office to pick it up. To provide for customers such as these, railroads often employed either "team tracks" - spurs which were so arranged that teams (of wagons, originally, and hence the name) could load and unload alongside, and which, among other railroad functions, served as designated points where less-than-carload shipments could be picked up by the customers, or, given enough demand for it, a dedicated freight station where railroad freight agents sorted, distributed,

warehoused, filled orders, and collected payment. In many cases, railroads made use of both team tracks as well as freight stations, and there were hundreds if not thousands of towns that were served by a single station which housed both freight and passenger business under one roof.

Finally, another consideration of the P&N's freight business was the need to provide express service at stations, and here again the combination station was the perfect solution. Express service was used for time-sensitive or perishable freight such as mail, baggage, or produce shipments. Larger railroads, in fact, often relied on dedicated mail trains and some, particularly those in the South, also operated "orange" trains – express freights comprised solely of refrigerated cars ("reefers") that were iced and loaded (for example, in Florida) and promptly sent directly to their destinations, stopping only for re-icing the cars if necessary. While the P&N's express freight concerns were much smaller, they were nonetheless important:

...the express service, which the P&N had offered since the beginning, became especially valuable to businesses and factories in towns along the line. A plant in Gastonia, for example, could call a supplier in Charlotte for a part needed to return a damaged machine to production, confident that within a few hours it would be delivered to the P&N station off Franklin Street, or directly to his loading dock if he was served by the electric line.⁸

Architectural description. The form of Hook's P&N stations followed closely their function and fit the general form of small combination depots which date from the early twentieth century. They were very similar in form, and to an extent in style,⁹ to those found on other railroads, yet distinctive in exterior appearance and, as necessary, in the layout of interior waiting areas and administrative spaces. However, Hook's design also incorporated enough Spanish

⁸ Fetters and Swanson, *Piedmont and Northern: The Great Electric System of the South*, p. 76.

⁹ Although not as ornate or sophisticated, they bear a marked resemblance in color, material, and style to several stations built just two or three years earlier for the Southern Railway by Franklin Pierce Milburn, one of which (Salisbury, North Carolina, 1908) is described in Chapter One. Milburn himself designed some of Charlotte's most stately homes; it is quite possible that he and Hook were acquainted with one another.

Colonial-influenced architectural elements to give the stations added aesthetic qualities and a slightly more august overall look. This is most visible in his choice of red, Spanish tile roofs with wide eaves ornamented by paired heavy wooden brackets. The brackets are one of the few applied ornaments present. Small attic vents break up the peak of the roofline, and in the smaller stations a cross gable projects slightly from the mass of the building to form the shallow bay of the stationmaster's office between the passenger and freight areas of the building.

The stations were constructed of local brick laid in running bond, usually buff tan or yellow in color, with thicker, red brick watertables encircling the buildings just below the concrete sills of tall double-hung windows (in most cases, six over six). These watertables were were rounded off at corners and doorways – an aesthetic gesture but also one that presumably was intended to dampen the effects of scraped knuckles and elbows associated with the movement of luggage and large packages in and out of the buildings. Some doorways and windows also featured transoms.

Hook used [these] design motifs and materials... in all his P & N buildings, including the large freight station that stood until 1980 in downtown Charlotte. In each case the natural colors of the building materials, red roof tile, brown wood, yellow brick, and red brick, gave the structures their color. The architect used carefully functional forms for the structures, but gave them a quiet elegance through attention to detail.¹⁰

Under the wide overhang of the roof at the passenger end of the station, one also finds cast concrete benches built into the wall. Although it has been claimed that this bench was a thoughtful consideration given to potential "overflow" of passengers,¹¹ and it certainly *could* have served that purpose, it is far more likely that it was provided to satisfy a more prevalent social condition which existed at the time. In a photograph of the Greenville passenger building (separated from and of later construction than the first building, and not one of Hook's originals),

¹⁰ Morrill, Dan L., op cit.

¹¹ Morrill, Dan L., op cit.

one of the doors is clearly labeled "white." Plans for small shelters at several locations also indicate segregated waiting areas.

In the larger stations, there was some variety in how each station was adapted to its particular construction site, but by and large the standard design held. Both the passenger waiting area and, in particular, the freight house could be larger or smaller as needed – the latter being simply "pulled" off the former to whatever length along the track would best accommodate anticipated traffic. This may be observed, for example, by comparing the number of attic vents on the roof of the freight section at Charlotte or Anderson (five or six) to the number of vents at Greer (three). Because of the existing building density at Spartanburg, only the two-story block was built. It was constructed abutting a wall it shared with what appears to have been a pre-existing structure, although the overall station "footprint" was very similar. The existing three-story warehouse housed some of the railroad's freight activity while the characteristic P&N addition housed railroad offices. In Anderson and Charlotte, passengers entered separate passenger buildings and proceeded down to the lower floor to reach the platform, located trackside at the rear of the building. This separation of passenger and freight was in itself a distinguishing characteristic of larger P&N station facilities.

At Charlotte, Spartanburg, Greenville, and Anderson, passengers came to be handled at platforms physically separated from the main building, which continued to serve as a freight station. The original P&N building was most likely intended to house both under one roof (as at all of the railroad's other stations), but, subsequently, each of these downtown "terminals," as the railroad itself called them, acquired a modest wooden platform covered by a simple umbrella shed roof and accompanied by a smaller, less distinctive building (which bore little resemblance to its parent), where travelers awaited their trains. They tended to be located on the opposite side of the small railroad yard at the original station, or on the opposite side of a street or city block. They almost seem like afterthoughts, and no definitive reason for their use has come to light, but the most plausible explanation is that the outlying building and platform probably better served the connection between the P&N and the local trolley lines (which were themselves associated, to varying degrees, with Duke and his electric utility empire). At both Charlotte and Gastonia, for example, the track leading to the platform ran down the middle of a city street for a short distance and was shared between the P&N and the local trolley line.¹² In fact, the Gastonia trolley company was controlled and operated by the P&N from 1911 until 1948, when the trolley line was dropped altogether after Franklin Street was designated as part of U.S. Highway 29.¹³ In Greenville, P&N trains turned around on the downtown trolley tracks which looped around Washington, Main, Coffee, and Academy Streets.¹⁴

The second standard P&N depot was a single-story combination station built parallel to a through-track arrangement (as opposed to the larger ones which were built adjacent to stub track configurations). Examples of this plan were built in the smaller and more numerous communities served by the railroad, including Belmont, Mount Holly, and Thrift, North Carolina, and Belton, Donalds, Hodges, Honea Path, Pelzer, Piedmont, and Tucapau, South Carolina. Virtually all are identical to each other, with only minor differences (e.g. their length). Belmont, North Carolina, is unique, however, in that the passenger end displays attributes not found on other single-story P&N stations, and the fenestration in particular is unique among all P&N stations. Instead of the typical pair of tall windows in a cross gable, the Belmont Station was constructed with a triplet of these windows facing the track and grouped under a single long lintel. Toward the opposite end of the building, there is a bay in the trackside wall; it is a true

¹² Fetters and Swanson, op. cit., pp. 112 and 123.

¹³ *Ibid.*, p. 91.

¹⁴ *Ibid.*, pp. 102-103.

bay, however, and is not cross gabled. Nor are the attic vents present, and cornice brackets were used singly rather than in pairs. In overall appearance, this single-story station more closely resembles its larger, two-story cousins; it would appear that the railroad might have preferred to build that version but was prevented from doing so by a lack of available real estate and the somewhat unusual track pattern found at the site. It is equally possible that the railroad simply asked the town fathers what they wanted the building to look like. Belmont is one of the most unique of all P&N stations, a status made all the more significant by the fact that it is also one of the last to remain standing and in good condition.

There is a third and very small group of atypical stations: depots that appear to have been built at various times *after* the originals as the railroad discovered its need for them. Three in particular are worth mentioning. At Belton, South Carolina, the P&N actually built two depots (both now lost) – as opposed to one main building with a satellite passenger platform – the only community in which it did so. The first to be built was a standard plan combination station located adjacent to Main Street at the end of a pair of stub tracks which branched off the north to south main line. Some time before 1924, perhaps even at the same time as the first station, the second was built roughly one-half mile away on O'Neal Street, adjacent to the main line itself at a place referred to by the railroad as "Substation." It appears to have been a brick building, of the same color as other P&N stations, with a hipped tile roof. It also featured the ornamental wooden brackets; however, unlike other P&N stations, these topped plain round supporting columns which carried the overhang of the eave at the passenger end of the building. These supports were identical to those used for umbrella roofs at P&N platforms in other cities. The red watertable was also somewhat subdued in comparison, being straight and square on the

corners. Absent were the cast concrete window sills and lintels, the sills having been replaced by a single course brick drip mold.

The exact reasons a second depot was built to serve this small town are not known, but Belton served as the dividing point on the South Carolina Division. The main line ran north and south between Greenville and Greenwood, while a western branch ran to the neighboring town of Anderson. Although the company retained the first station and continued to utilize it, the second one was built immediately adjacent to the P&N yard and just two blocks south of the Anderson Branch junction. There may have been an electrical substation located here (hence the listing on timetables as "Substation") as well. The first station was somewhat more remote in comparison, and is identified on early track charts (1921) as a "freight" station, while the latter is indicated as a "passenger" station. Most significant is the fact that the second station was built on through tracks. It is quite possible that the company wanted to headquarter its Belton operations closer to the yard (which may not have existed when the first station was built), for it was at that point that traffic was sorted for connections to and from Anderson. In other words, operational efficiency may have required greater consideration than convenience for riders. However, it is also possible that the choice of location reflects an increase in vehicular traffic, as those who wished to ride could, by this time, drive to the station and park. The railroad may have seized a perceived opportunity to better serve its own needs without the risk of losing riders.

Another atypical P&N station was built at Taylors, South Carolina. It was the only "fullservice" station known to have been entirely of timber frame construction, raised off the ground on brick pillars, and painted to match the colors of the brick ones. Very similar in form to the second Belton station, it echoed the earlier buildings with its use of a pair of double-hung windows within a small cross gable. There was also a nod to the early stations in the form of angled wooden braces that supported the eaves, but they clearly were feeble descendants of the stylish brackets they were meant to suggest; they were as straight and simple as a gallows. The building probably never had a tile roof, either; even in early photographs it appears to have an asphalt shingle one instead. In the words of P&N historian Thomas T. Fetters,

Taylors [was] the only wooden... station. It's almost like it was added as an afterthought.... They knew they needed another station, but said "We're not going to spring for brick on this one."¹⁵

The Taylors station was probably built during the Depression or following the period of USRA direction during World War I; at either time brick would indeed have been an expensive material for a small railroad.

The third known unusual P&N station was the freight station built at Lowell, North Carolina, shortly after World War II (c. 1947). Constructed of brick and defined by its squarish appearance, it scarcely resembled Hook's 1911 design. With its painted representation of a watertable, concrete bench and sills, and a tiled parapet around a flat roof, there was little to suggest that it was even a railroad station. Nevertheless, the presence of even these minimal features reflects an unusual amount of attention given to the appearance of what was essentially a warehouse devoted almost exclusively to the freight business. It has, however, a few details in common with the small "outparcel" passenger stations at Charlotte, Greenville, and other locations, specifically the tile cap on the parapet wall and the concrete sills. In addition, one may note in the photograph of Lowell a small wooden structure in the foreground, which stands slightly apart from the newer building and closer to the tracks. This is the passenger shelter for Lowell and, prior to the construction of the new building, may have been the closest thing to a station the P&N had in that small community. With dieselization of the railroad and the

¹⁵ Thomas Fetters, telephone interview, September 26, 2005.

cessation of passenger service both coming just three years later, the latter building was almost certainly the last P&N station to be built.

Lastly, it should be pointed out that not all *stops* along the P&N had *stations*; the railroad had many more "flag stops" than it had stations, where the train only stopped if someone were waiting at a designated location. In presenting arguments before the Interstate Commerce Commission, the P&N claimed no fewer than one hundred stops for all of its 125 miles, with more than twenty-five between Spartanburg and Greenville alone. The resulting average is a stop approximately every one and three-tenths miles. Penciled into the margin of the document is a company representative's note: "Formula: Miles Between Termini [divided by] nbr of station + flagstop intervals."¹⁶ In many of these cases, the designated location was simply a place where road and rail met, or the site of a mill that employed large numbers of the countryside's inhabitants at a central location. "White Horse," South Carolina, for instance, derived its name from the fact that it was located at the point where White Horse Road crossed the P&N tracks. "Hoskins," North Carolina, was the location of "Hoskins Road," the "Hoskins Mill," and the "Hoskins" amusement park. At these flag stops, the P&N erected a wooden sign, painted a name on it, and, in most cases, erected a small wayside shelter as well. Most of these shelters could be fairly described as being about the size of a telephone booth or an outhouse.

For clerical reasons, flag stops were treated as stations in advertised schedules and official Timetables (together with the Book of Rules, the railroad employee's Bible), where they are sometimes annotated by the phrase, "Stop on signal," but there was no station building present. A unique feature of at least some of them was their semaphore "order board." Although today it would be unthinkable to allow the general public to have direct control over a railroad

¹⁶ Piedmont and Northern Railway Company reports, Manuscript Collection No. 16, Atkins Library, University of North Carolina at Charlotte.

signal, that is precisely how these flag stops were originally intended to function. Each flag stop order board was similar to the ones used at the bigger stations, and waiting passengers themselves actually set the signal to "STOP" to alert the approaching train that it had a fare to pick up. On the P&N, even a regularly used flag stop might only provide two or three riders a day, perhaps several dozen a week – not enough to justify the expense of erecting a true station – and, by contemporary standards, the simple wooden shelters and signals were probably quite adequate.

There are, however, two examples of plans drawn up by the P&N's engineering and maintenance of way department which show small passenger shelters to be built at four South Carolina locations: Saxon (the Saxon Mill, then on the outskirts of Spartanburg), Paris and News (in the Greenville vicinity), and an unknown location (presumably also near Greenville) referred to as "Clairmont."¹⁷ The two plans were approved by the railroad's chief engineer, A.C. Lee, in February and March of 1914. The second drawing, in fact, may be a revision of the first; the two share an identical floor plan, although the second plan is a bit smaller. If built, the second plan also would have more closely resembled Hook's stations: instead of granite, it stipulated brick, laid in the same bond as the Hook stations, and featured a cross gabled hipped roof instead of a simple hipped roof. It also was to have a red brick watertable similar to that used in Hook's stations.

It is not known in how many other cases such shelters were built – whether there were others in South Carolina, similar examples in North Carolina, or if these four themselves were ever actually built. What is most intriguing about these plans, though, is that unlike Hook's designs, which were clearly intended to serve the general public within a city or town, these

¹⁷ The name "Clairmont" does not appear on available P&N timetables from the period, but it is mentioned in a list of points in South Carolina served by the P&N. That pamphlet dates from about 1924.

small shelters were likely conceived as a provision for the textile mills served by the P&N at each of their respective locations. There is no office or freight space in their plans; subdivided by a concrete bench with a tall back, these one room shelters were obviously intended for passengers only.

Yet even these diminutive buildings featured minimal aesthetic embellishment resemblant of that found on Hook's stations (it is equally plausible that they were intended to look like the mill buildings present at their locations) – most notably the roof, which was to be "of red tile furnished by the Owner," according to notes made on one plan. It is not clear whether "Owner" refers to the mill or to the railroad; the railroad may have designed and built (and perhaps even maintained) a shelter that was to be owned by the mill -a not implausible arrangement given the paternalistic culture of Southern textile mill society at the time. Further, there are a few instances of small depot buildings, such as the one at McAdenville, North Carolina, being used at one time near mills along the P&N. The McAdenville depot was a very simple weatherboarded wood frame affair whose presence could only have been justified by its relationship to McAden Mills – for the mill was the town's raison d'être. Although it may have originally been painted to resemble the Hook stations, the McAden Mills depot was almost certainly a later addition and could have very easily been built either by railroad maintenance of way personnel or by the mill itself. The pattern that emerges from these very small shelters and depots is suggestive of the closeness of the relationship between the P&N and its customers: it is entirely possible that in cases like McAdenville, Saxon, and elsewhere, a local mill, perhaps even in partnership with the P&N, built small shelters and depots just to serve the mill, probably exclusively. These "stations," then, may have been attributed, over time, to the P&N - not necessarily because it *built* them, but because it was the railroad that *served* them.

Apart from sites such as those, which seem to have been the exception rather than the rule, flag stops came and went easily as demand for them fluctuated. Stops listed on a 1915 timetable may or may not appear on a timetable from 1945. Further complicating the matter is the fact that these stops were sometimes given rather arbitrary or colloquial names which are apt to have changed over time.¹⁸ These flag stops no doubt dwindled in number as road networks expanded and automobiles shortened the English mile, but the fact that the railroad even offered such service to whomever was able to walk out of the countryside and wave down a train is one of the most fascinating – and least documented – aspects of the entire P&N operation. It represents an effort to provide a minimum standard of transportation and urban convenience to a sparse, rural population; something without parallel in the automobile-dominated world of today. Certainly, for instance, municipal buses do not often venture beyond the city limits, and taxis are different in that they usually operate from door to door rather than from point to point or "center" to "center."

The idea of establishing gathering points across the countryside and providing interurban transportation is itself unusual in the South, a region whose people (until poverty, crop failures, and expanding industrialization drew more of them into the city during the mid-twentieth century) eschewed most things urban in favor of a philosophy of agrarian self-sustenance. The artifice and leisure of town was not necessary to maintain health of body or soul, and was in fact often regarded as detrimental to both. The P&N brought these people to town, usually for jobs at the mill or the powerplant. Jobs in the city were, in turn, more plentiful as a result of improved

¹⁸ Historically, all railroads give names to points along their lines which are significant from a railroading point of view, but which might be otherwise meaningless; the name may or may not have crossed over into popular use, and its appearance on a railroad map or timetable does not necessarily indicate a community of the same name at that location. The tradition probably dates back to the earliest days of railroading, before radios, computer-controlled signals, or even signals at all. Naming this location and that location provided railroad employees with a mental reference to the geography of the territory in which they worked. Among other things, they could time their progress with a watch and knowledge of commonly agreed-upon points. It would be a bit like giving someone driving directions and saying, "Get ready to slow down when you come to the big White Oak with the split trunk."

rail transportation. The P&N had an immeasurable and substantial effect on the social connections and kinships of working class Piedmont families, and thus played a key role in the fundamental reshaping of rural Piedmont society. That change, however subtle, was a powerful force to be reckoned with, one with ripple effects and consequences that continue to be felt even today and have only recently begun to be understood.

GENERAL DISPOSITION

Piedmont and Northern stations were of high architectural quality and were designed by a regionally significant architect; yet, nearly all of C.C. Hook's lovely buildings for the P&N have been lost. Ironically, the loss is at least partly a result of the little railroad's immense success and its own effort to assist in the industrialization of the region. For, besides its slogan of "Service with Courtesy," the railroad also employed the catchphrases, "Built to Serve; Serves to Build" and "A Mill to the Mile." The population of Charlotte, the corporate home of the railroad, nearly doubled between 1900 and 1910, from 18,091 to 34,014, an increase of eighty-eight percent and the largest single increase in the city's history since the Civil War.¹⁹ It was this boom on which Duke intended the P&N to capitalize, and during its six decades of operation, from 1910 to 1970, Charlotte's population grew by more than 220,000 – six and one-half times the 1910 population. "By 1930 [it] would surpass every town in North Carolina and even the venerable port of Charleston in South Carolina to emerge as the largest city in both states.....²⁰ The mill industry surged; by 1927 textile production in the South had eclipsed that of New England, long the traditional center of American textile milling, and over half the cotton spindles in the South were

¹⁹ Hanchett, Thomas W. Sorting Out the New South City, p. 2.

²⁰ *Ibid.*, p. 90.

located within one hundred miles of Charlotte.²¹ In comparing Charlotte to other industrial Southern cities, such as Richmond, Raleigh, and Durham, P&N President Franklin Way always described the city as one desiring to be "progressive," a view shared by other former employees of the railroad, including Thomas G. Lynch (Vice President and Director of Industrial Development and Public Relations) and Frank M. Sellers (General Manager). The city has historically valued "progress" as a cultural priority, an attitude that continues to manifest itself today in Charlotte's role as the second largest banking center in the United States.

In making a material contribution to this ever-rapidly increasing industrialization of the Piedmont, the P&N was sowing the seeds of demolition for its stations by helping to generate greater density of population, business, and industry, plus a higher demand for real estate in downtown areas. Thus, as the need for passenger service waned and freight operations became increasingly marginalized by a growing post-war trucking industry, the once proud stations became more valuable as property that could be developed. After the merger with Seaboard Coast Line, there was very little need for the new parent company to retain these buildings, and in general a process continued which the P&N itself had begun a few years earlier: the sale of station property not essential to its operations.

Typical of this period of demise are three examples in the Greenville, South Carolina area. The little wood frame station at Taylors, for instance, was closed by the P&N on March 31, 1966, as a result of Burlington Industries' closure of Southern Bleachery and Print Works, the major P&N customer at Taylors. Even though the railroad continued to serve the area, it was clear that traffic there would be insufficient to warrant continued support of the station. Permission was granted by the South Carolina Public Service Commission to close the agency, and services were shifted to Greenville. Within a year the former P&N depot property had been

²¹ *Ibid.*, p. 92.

leased to ASM Industries and Pargas of Piedmont, Inc. "These two firms... [used] all of the buildings and property previously used for the station."²² ASM was a distributor for Dow Chemical and used the property to store MAPP (methylacetylene propadiene, an industrial fuel gas used mainly as a substitute for acetylene), and local propane distributor Pargas seems to have done likewise with its product.

Similarly, the Williamston, South Carolina, office was closed around October or November of 1968; customers there agreed to do business through the Pelzer station, only two miles away and "on the same telephone exchange."²³ About the same time, the company sold five acres of its Greenville station property to a group of private investors, from whom it continued to lease the original building.²⁴ The P&N Sales and Service office had already been moved, a year earlier, from the second floor of that station into the much smaller passenger building (vacant since the end of passenger service in 1951) across the street at the corner of Academy and West McBee Streets.²⁵ Upon the sale, the railroad also quit its use of all but two of the tracks which served the property; the rest were either abandoned in place or taken up.

²² P&N News, January/February 1967, p. 3.

²³ *Ibid.*, October 1968, p. 2.

²⁴ Id.

²⁵ *Ibid.*, November/December 1967, p. 2

CHAPTER FOUR

RECOMMENDATIONS AND CONCLUSION

ADAPTIVE REUSE

The examples in the foregoing chapter illustrate the kind of necessary evil that befell many stations, for the railroad was constantly fighting to survive under increasingly difficult circumstances. In other locations the story was much the same, with most P&N stations now either vanished or fast disappearing. Those located in downtowns gave way to redevelopment; those in suburban and former rural areas were lost to sprawl and are now occupied by industrial development. Others were torn down, leaving vacant lots, or left to die lingering deaths. Not all have been lost, however. Although, unfortunately, not one of the larger facilities remains completely intact, a handful of the smaller ones remain, serving in various capacities as farmer's markets, museums, shops, and offices, while a few others are standing empty in conditions varying from "stable" to "advanced disrepair."

In North Carolina, the former P&N station at Belmont appears to have a fairly bright future. It is located in the heart of downtown Belmont, a city which seems committed to keeping its historic downtown alive and well. A Saturday afternoon visit reveals a steady flow of pedestrian and vehicular traffic, a healthy lack of available parking, and well maintained historic downtown buildings. Banners hanging from each lamppost proclaim this to be historic downtown Belmont. Both the lampposts and the banners are "off the shelf" decorations, surely, but there is no disputing that downtown Belmont is alive and well. The P&N station, at 4 Main Street, is generally in excellent condition. Previously occupied by a small railroad museum, it now houses a dress shop in the former passenger waiting room, while the building's owner uses the freight section for storage. The exterior is very well maintained; the interior (that part of it accessible to the public) has not been substantially altered, although it has been painted in dressshop-appropriate pastels. There has been no rearrangement of doors or windows, and very little alteration to interior walls; the building's floor plan is now much the same as it was originally.

The Mt. Holly station is undergoing rehabilitation as leased office space. A Charlotte area developer, Charles Guignard, purchased the station and its one acre site from CSX Transportation for approximately \$50,000. It appears to be in very good condition from the outside; the roof, which appears to be new, is of terracotta tile and matches the original. Although the inside is now subdivided, it appears that the work is being carried out without major alterations to the interior. The building was closed on a Saturday visit, so very little of the inside was visible. Guignard first began the project in 1999 and has said that "[his] desire is to make the building look as much like the original building as [he] can."¹ He has also expressed a desire to have the project qualify for both federal and state (North Carolina) tax credits, and to that end he would indeed have to perform an acceptable rehabilitation. After more than two years, the project appears to be nearing completion and, overall, appears to have been well executed. At one end of the exterior, however, the earth has been excavated all the way to the bottom of the foundation, and sealed windows have been installed in vents along the foundation that once allowed air to circulate under the building. Both alterations seem to be aimed at creating a basement for added space.

In South Carolina, there are two examples of adaptive reuse, represented by the P&N stations at Anderson and Greer. Greer is unique among all existing P&N stations in that it is the only one which retains its two-story block. Today, the building has been subdivided into several

¹ Elkins, Ken, "Mount Holly depot to become offices," *Charlotte Business Journal*. September 26, 2003.

shops and offices. The Greer station was rehabilitated beginning in the mid-1980s² and today houses half a dozen shops and offices in its subdivided interior. Anderson is another unique survivor; its very long freight warehouse is the only such P&N building still standing. Like Greer, it, too, has been altered, most noticeably by the addition of ramps and railings to the freight platform on one side of the building (to comply with ADA requirements). It has also been partially repainted, and the interior is either being used for storage or still in the process of undergoing rehabilitation. The outside of the building – that is, the freight docks running the length of either side – is currently used twice a week (Tuesdays and Thursdays from nine o'clock a.m. "until") as a farmer's market. The area surrounding the building is undergoing general rehabilitation and improvement and thus it appears to have a secure future. Facing Main Street, and backing up to the freight building, is the small passenger station, currently occupied by the offices of the Jones Law Firm. While the exterior appears little changed, the interior has been substantially altered.

RECOMMENDATIONS FOR FURTHER RESEARCH

Several possibilities, both broad and specific, exist for conducting further research. One extremely valuable resource would be measured drawings of a typical Piedmont and Northern station. The single-story standard design is not a particularly complex building, either in size or in plan; several are within a relatively short drive of Athens and, besides constituting important documentation of a historic resource, would make excellent subjects for first-year preservation students satisfying their drafting course requirement. The best candidate for such a field trip is probably the station at Donalds, South Carolina. It is a good choice because it not only typifies the single-story standard plan, but also because, of the "derelict" stations, it is arguably the one

² "Station Plaza central to plans," *Greenville News-Piedmont*. March 1984.

in the best overall condition and is the most stable. The grass is kept mowed and the site is relatively free of clutter; one can easily get around the outside of the building with tape measures and levels. Further, getting access to the property would not pose a problem as it is owned by the adjacent homeowner. She and her late husband purchased the station from the Seaboard Coast Line Railroad. She is devoted to the building and maintains it as best as she is able; she would undoubtedly welcome students taking interest in it.

Two other specific subjects are also recommended. The first would be a study of the engineering and "architecture" of passenger cars, with special attention given to the Pullman Company. As limited as that may at first sound, photographs of the interiors of coaches, "parlor" cars, sleepers, and observation cars reveal that a great deal of innovation, skill, and craftsmanship was invested in constructing comfortable accommodations within the very narrow confines of railroad physics and logistics. With that in mind, early twentieth century passenger cars were works of art. A house, for instance, can be any size and shape, but a railroad car must conform to limiting factors that do not change. It is extremely challenging to create spacious comfort and attractive decor while providing running water, air conditioning, and meals - all within approximately eighty-five by eight and one-half feet. The second subject would be a study of the history of the "Railroad YMCA." That railroads often relied on them to house layover crews is certain, but it also seems that in some cases local YMCA's were directly sponsored or operated by the railroad. It should be pointed out, however, that shedding substantial light on the connection between railroads and "Y's" might prove extremely difficult, as it is a subject about which very little is known.

Above all, the most immediate need is for further research into the railroad history of the South, specifically that of the "New" South. Railroad history of the New South is arguably the

most endangered of a highly perishable genre, for two reasons. First: railroads themselves see things strictly in terms of their "bottom line." They are classic examples of how cost and efficiency dictate everything throughout every stratum of the company, from construction to operation to sales to, of course, facilities. In terms of the built environment, the railroad landscape has changed dramatically since 1910 (when track mileage reached its peak in America) and continues to evolve from year to year. This paper has mentioned a trend toward centralization of railroad organization and operation; apart from the impact of the automobile, which is well known, this trend in railroading is perhaps the largest single factor one must consider when looking at the erosion of early to mid-twentieth century downtowns. It is when the tide of railroad traffic recedes that warehouses and commercial and recreational centers are abandoned and the entire economic focus of a community shifts. If the single largest employer in town closes its factory and moves to Mexico, the railroad traffic moves away as well. In turn, all of the activity that once sustained the neighborhood begins to move away. Typically there is a migration to the outer rim of town or to satellite communities – away from the railroad corridors, which, in turn, begin to decline and become inner-city sore spots. Southern cities along the Piedmont geographic corridor, such as Lynchburg, Danville, Durham, Charlotte, Spartanburg, Greenville, and Atlanta, are notable among many that have been thus affected.

Second: It is the New South that has experienced fundamental societal and economic changes, and the railroads of the region were closely intertwined with them. The railroad, of course, is only one part of the complex issue of "sprawl" and socio-economic changes in the New South, and it cannot be examined in a vacuum that ignores the automobile, the post-World War II population boom, changes in Civil Rights, and so on, but it is probably the least studied. In some cases railroads helped bring about the change; in others the railroads were affected by

the change. As this paper has attempted to show, one of the more significant areas in which the railroads had a profound impact was in the industrialization of the region in which they operated. It has focused on one railroad in one region, but similar examinations could be made of other carriers in other regions, with special attention paid to the "heartland" region of a given state. These are the areas which have undergone the most significant changes in demographic composition, social order, and economic stability over the last one hundred years. Broad changes have had an intense effect on the infrastructure and built environment of these communities.

Specifically, it is recommended that an examination be made of the Durham and Southern Railway. The D&S was another Duke interest which, like the P&N, helped to supply Duke's power plants, although it was a steam, rather than electric, railroad. The two companies were closely associated, sharing executive management and public relations departments from the Depression until the early 1950s. Furthermore, Durham, North Carolina, is a city of unique heritage; one which thrived on tobacco processing in much the same manner as Charlotte, Spartanburg, and Greenville flourished on the textile industry.

CONCLUSION

Of the utmost importance is the collective value P&N stations hold for the future of transportation in North and South Carolina. It is immediately obvious to anyone exploring the former P&N right of way in North Carolina that substantial portions of it – if not its entirety – are owned by the North Carolina Department of Transportation (NCDOT). For several years, NCDOT has been gradually working on a plan to restore interurban passenger service in several urban areas, of which Charlotte is the most obvious and most immediately practicable. The larger context of the project is to incorporate it as part of the state's vision for high-speed rail

service in the Washington to Atlanta corridor. It is significant that the state owns the right of way in this corridor; Norfolk Southern has leased it a second time, for another ninety-nine years, but the route is ultimately at the disposal of NCDOT, which already operates intercity "commuter" trains on the same line. In the case of former P&N rights of way, what is available to the state is an extant route roughly twenty miles long, from Charlotte out to Gastonia, that could be upgraded to allow faster train speeds (though that should not be confused with the "high-speed" route, which has a projected top speed of about two hundred miles per hour) and thus incorporated into a seamless rail transportation network. Not only would existing P&N stations be ideally suited to serving such a "feeder" line, they are excellent architectural examples which *should* serve as models for any new stations designed to serve that feeder line and others as well.

In South Carolina, where rail service between Charlotte and York is already being experimented with, planners should consider most seriously the use of P&N rights of way – and thus extant P&N stations in the same manner – as models for new designs and as key elements of any feeder lines that would serve the high-speed rail route as it passes through Spartanburg, Greer, and Greenville. Furthermore, and especially if, as anticipated, a second high speed corridor were to pass through Columbia, these buildings would be a tremendous asset to cities like Anderson and Greenwood, which are sizeable and significant enough to benefit from high speed rail service – but which are not located directly on *either* projected corridor.

It simply cannot be overstated: the inherent worth of these stations to such a project must not be underestimated, for there is *no* better imaginable use for P&N rights of way and stations than as key parts of future rail service in the Carolinas. "Rails to Trails" is an excellent program. Rehabilitation of stations into shops and offices is a terrific way to keep the buildings in shape and expand the local tax base (that is what always gets the attention of local powers-that-be). Museums are educational and recreation fun. But what better way to utilize these stations than in their intended capacity *as* stations? Failure to act upon such an opportunity would not only constitute poor regional planning in two states with very similar interests, it would demonstrate a profound and unconscionable lack of sense.

CHAPTER FIVE

CATALOG OF STATIONS

(Illustrations begin on page one hundred ninety-one.)

CATALOG

The following is a complete listing of the dispositions of each known Piedmont and Northern station, drawn from six timetables and a company pamphlet spanning the years 1919 to 1951 and including flag stops. Flag stops have been included for two reasons. First, they make a contextual contribution to the reader's sense of "P&N geography." Second, P&N stations in general are little known (few people today have even heard of the railroad itself), and although every effort has been made to determine exactly what the railroad built and where it built it, there is so little documentary and physical evidence remaining that one must allow some room for error. In searching for something it is often helpful to know where *not* to look, and thus it is hoped that any future research that may be conducted into the P&N will benefit from as complete a listing as can be provided here. Station stops are shown in bold faced type; flag stops are shown in italic type with the years they are listed on available timetables in parenthesis. Also included is a typical plan (Fig. 5.1), not drawn to scale, for a single-story combination station. Unless otherwise noted, all photographs and images are the author's.

Abbey, North Carolina (1924, 1928). "Abbey" no doubt refers to Belmont Abbey College, located on the north side of Belmont. Today, Interstate 85 goes under the P&N and passes beside Belmont Abbey below grade.

Anderson, South Carolina (REHABILITATED, Figs. 5.2-5.8). As it had at other locations, the P&N used two buildings to serve the city of Anderson. The freight station, located on the corner of Murray and Federal Streets, is identical to the freight house portions of stations at Charlotte, Gastonia, and Greenville and is the sole survivor of the type. The building was originally built with a two-story bloc at the Federal Street end. That section may have been partially destroyed by fire and "rebuilt" as part of the single-story freight section.¹ Whatever the cause, the twostory section was altered by the P&N itself. The freight section is now in use - having been partially painted and having had wheelchair ramps added to one side – as a farmer's market, open for several hours twice a week (Tuesdays and Thursdays). The interior appears to be undergoing rehabilitation for use as shops, restaurants, or offices. The passenger station, at 415 North Main Street, also remains standing. It has been substantially altered, particularly the interior, and currently houses the law offices of the Jones Law Firm. The entire block on which the buildings are located is in the heart of Anderson's downtown and is currently undergoing general improvement and rehabilitation. A short section of P&N track that once led to the passenger station has been retained as part of the landscaping and as a subtle suggestion of the building's history.

Beattie, North Carolina (UNKNOWN). Whether Beattie actually had a building present or not is not clear. It is listed on a 1927 timetable as a station stop, but no other evidence has surfaced to corroborate the timetable. "Beattie," by that name, is not a known location; it would have to have been between Rhyne and Mount Holly, a distance of about two miles. The official distance from Beattie to Mount Holly, as recorded on the 1927 timetable, is one-half mile. The most logical location for the place, then, would be a place named on topographical maps as

¹ Thomas Fetters, interview, October 22, 2005.

"Sodyeco," an acronym of "Southern Dyestuff Company." It is about a half mile from Mount Holly and is on the opposite side of the Catawba River. If present in 1927, such an industry would have been an archetypal P&N customer, and it might have generated enough riders to require a semi-permanent station – perhaps something similar to the wood frame depot erected at McAdenville. If that were the case, though, the mill could have built a "depot" itself. With a lack of evidence to suggest otherwise, that is the most likely scenario for "Beattie" if it had anything more than a wayside bench.

Belmont, North Carolina (REHABILITATED, Figs. 5.9-5.15). The unique P&N station at 4 North Main Street in Belmont is now occupied by a dress shop. Until as recently as August 2005, it housed a local chapter museum of the National Railway Historical Society. Along with the stations at Thrift (Paw Creek) and Mount Holly, it is one of three remaining P&N stations in North Carolina.

Belmont Junction, North Carolina (UNKNOWN). As with Pinoca and River Junction (South Carolina), Belmont Junction is probably listed on timetables as a station stop because it was significant in terms of railroad operation. It was the point at which a branch left the main line between Mount Holly and Gastonia and ran about three miles down to the town of Belmont (above). The junction was located (the branch into Belmont is now abandoned) in an area known today as North Belmont. It is quite possible that a small shelter of some sort was located here; it does appear as a station stop on a 1928 timetable.

Belton, South Carolina (LOST, Figs. 5.16-5.19). Belton was unique in that it once boasted two complete stations (as opposed to a main building with a satellite passenger platform), both of which are now lost. The first station was built adjacent to Main Street along a set of stub tracks; it was the only single-story station so situated, being approximately one-half mile from the north-south main line and at the top of what must have been a fairly steep grade. Although the choice of that site was no doubt determined by other circumstances such as availability of real estate, building density, and the overall grade through town, it may have been a factor in the railroad's construction of a second station at the intersection of the main line and O'Neal Street (although the first building was retained and continued to be used for some time afterwards).

The second station is listed on early timetables as "Substation" (below) and there may have indeed been an electrical substation at that location. Like the first, "Substation" appears to have been a brick building, of the same color as other P&N stations, with a hipped tile roof. It also featured the ornamental wooden brackets; however, unlike other P&N stations, these topped plain round supporting columns which carried the overhang of the eave at the passenger end of the building. These supports were identical to those used for umbrella roofs at platforms in other cities. The red watertable was also somewhat subdued in comparison, being straight and square on the corners. Absent were the cast concrete window sills and lintels, the sills having been replaced by a single-course brick drip mold. In place of the enclosed freight room found at other stations, the railroad elected to attach a simple raised freight dock to the end of the building.

Black, South Carolina (1924). Location unknown.

Blakedale, South Carolina (1924). Located just north of Downs Siding and thus about four miles north of Greenwood, Blakedale is a small community along United States Highways 25 and 178 (which run together). It is not clear whether it was a flag stop or a station stop.

Brandon, South Carolina (1919, 1927, 1930, 1943). Located approximately one and one-half miles west of River Junction, probably in the vicinity of Judson Mill, which was served by a spur into or out of which trains reversed. The location of the junction for this spur is probably where the Brandon flag stop was located.

Burris, South Carolina (1919, 1927, 1930, 1943). About two miles north of Honea Path, both the Southern and the P&N and pass through the tiny crossroads communities of Dosheno and High Point, respectively. "Burris" by that name does not appear on maps of the area, but timetables list it at approximately the same distance from Honea Path as these two locations, so it may refer to one or both of them. The location of the flag stop is unknown.

Calvert, South Carolina (1919, 1924, 1927, 1930, 1943). Located approximately five miles west of Spartanburg.

Campbell, South Carolina (1919, 1924, 1930, 1943). Campbell (sometimes "Campbells) is a location just west of Belton at a convergence of several country roads, namely Blue Ridge Avenue (South Carolina Highway 246), Payne Lane, Lamar Mitchell Road, and Major Road. Any shelter the P&N may have had would probably have been located close to this intersection as the P&N right of way passed through it.

Charlotte, North Carolina (LOST, Figs. 5.20-5.25). Located on Mint Street between Second and Fourth Streets, the Piedmont and Northern's station facilities at Charlotte consisted of two buildings, both of which are now lost. The original Hook building was built about 1912 and measured roughly 60 by 240 feet.² It bore the characteristic P&N look and served as the freight station and main office, while a subsequent addition, an L-shaped building on the corner of Mint and Fourth Streets, provided access to a platform for passengers. The arrangement was similar to that of Anderson, South Carolina. The waiting room was on the Fourth Street grade-level, while the trackside platform was one story below and to the rear. To reach it, P&N interurban trains rounded the freight station, in the block between Second and Third Streets, and traveled a short distance down the trolley tracks in Mint Street. After the P&N's merger with Seaboard Coast Line, the freight building survived until about 1980 (although it still appears on topographic maps issued in 1984) as the SCL's Charlotte freight office; it was demolished prior to the construction of Ericsson Stadium.

Cheddar, South Carolina (1919, 1924, 1927, 1930, 1943). A small crossroads community located about three and one-half miles north of Belton along South Carolina Highway 20.

Chick Springs, South Carolina (UNKNOWN, Fig. 5.26). It is not known if a station was actually built at Chick Springs; it appears on a 1919 timetable as a scheduled stop but is thereafter listed as a flag stop.

² Morrill, Dan L. et al. "The Thrift Depot of the Piedmont and Northern Railroad Company," report submitted to the Charlotte-Mecklenburg Historic Properties Commission, October 1, 1982.

City Junction, South Carolina (1919). An unknown location in the Anderson vicinity. Mileage on the 1919 USRA timetable puts it two miles distant from the Anderson terminal, but the P&N's right of way curved all around the north and east side of town, passing numerous possible flag stop locations. As with all flag stops that appear to have been used only during the period of USRA control, this one is somewhat suspect as a "genuine" P&N stop. Because it controlled multiple railroads, the USRA's operations and use of stations varied considerably from the operations and use of stations by individual railroads acting in their own interests.

Clairmont, South Carolina (1924). Location unknown.

Clevedale, South Carolina (1924, 1943). Clevedale, or Cleverdale, is a rather isolated spot on the P&N main line just a few miles west of Spartanburg. It is on the railroad but somewhat off other beaten paths in the area. The P&N stopped at a small wooden shelter here next to the mill.

Donalds, South Carolina (STANDING, Figs. 5.27-5.38). From Greenwood north to Honea Path, the P&N mainline was taken up by the Seaboard Coast Line, probably in the late 1970s, and the former P&N stations along this section of line abandoned. Of them, Donalds is the sibling which survives in the best overall condition. It is the only one in South Carolina which retains its original station sign. Several of the paired cornice brackets are missing, having been replaced with simple 1 x 4 boards as bracing for the eaves, and the original Spanish tile roof has been replaced with asphalt shingles. One interior brick wall which served as a partition (in other words, not load-bearing) has collapsed, and several windows are cracked or broken. Otherwise,

however, the building is remarkably stable and "straight," with no visible signs of failure in either the roof or the exterior walls.

The Donalds station is currently owned by the neighbor on the adjoining residential property. She and her late husband took considerable legal and financial pains to purchase the building from Seaboard Coast Line, as well as the remnants of the Donalds Southern Railway depot, which was moved to the property from its original location. Much to their credit, and despite having no formal knowledge of "historic preservation," the couple purchased the P&N station simply because "we hated to see it just fall down." If one is traveling north from Greenwood on U.S. Highway 178, the building is located on the right hand side next to South Carolina Route 184 and P and N Avenue. It is easy to spot from Highway 178.

Downs Siding, South Carolina (1919, 1924, 1930, 1943). Also sometimes listed as "Downs" on timetables, Downs Siding is located just north of Greenwood off United States Highways 25 and 178 (which run together). It is always listed as a flag stop only, but is one of the few such locations that has seems to have always been used by the railroad. One possible reason is that the "siding" from which its name is derived was long enough to hold a rather lengthy train, and that would have been useful to dispatchers for keeping the main line clear while getting trains into and out of the relatively small Greenwood yard, approximately three miles south.

Duncan, South Carolina (UNKNOWN). Unfortunately, apart from the fact that the P&N seems to have had a station at Duncan, no photographs or additional information has come to light. Duncan is listed on timetables as a regularly scheduled stop, which indicates there may have been a depot present. Whereas "flag stops" are those places without a station, places where, in

the old days, a flagman was posted to "flag down" the train for riders, scheduled stops are usually made at depots, and are often referred to on the railroad as "station stops." On the P&N, in every case where a depot is *known* to have been built, it is invariably listed on timetables as a station stop. While that is not conclusive evidence of a station at Duncan, it is strongly suggestive, even if such a building were not a Hook design. One possible explanation is that the "Duncan" station became the "Lyman" station (below) at a later date as new mills were built and the area developed around them – the two towns are literally only a block or two apart – which might also explain why "Lyman" is not listed on the earliest timetable available. Duncan was also the town nearest a small (by today's standards) powerplant served by the railroad, which may account for its inclusion on early timetables.

Fairmont Mills, South Carolina (1924). The location of this flag stop is not clear, but it appears that it was situated about eight miles west of Spartanburg on the Middle Tyger River, in the same vicinity as Clevedale, Startex, and (presumably) also Snoddy. However, the location now bearing the name "Fairmont" or "Fairmont Mills" is several miles east of the old P&N right of way, and the railroad never had a branch line that ran to the current area.

Gastonia, North Carolina (LOST, Figs. 5.39-5.41). Gastonia was the second largest terminal on the North Carolina division. At one time, the site was occupied by both a large Hook building, used as a freight station, and a smaller building or platform of unknown origin used as a passenger station. The arrangement was similar to that found at Charlotte, Anderson, Greenville, and Spartanburg. The freight station stood until it burned in the mid to late 1990s under – according to local rumor – somewhat suspicious circumstances. The property is now occupied
by the "Shrimp Boat" restaurant, with the actual station site being mostly occupied by the restaurant parking lot. The fate of the passenger building is unknown. A long warehouse fronting Franklin Boulevard (the former Gastonia Bonded Warehouse) dates to the early P&N era and appears to be the sole remnant of the P&N's Gastonia terminal. The warehouse was once served by a below-grade spur running behind it; the P&N yard beyond the building has been removed.

Golden Grove, South Carolina (1919, 1924, 1927, 1930, 1943). Not to be confused with "Goshen Grove," North Carolina (below), Golden Grove is a small community south of Greenville, South Carolina on Highway 20. Also known as Grove Station.

Goshen Grove, North Carolina (1927). This flag stop appears on a 1927 topographical map and was approximately one mile west of Belmont Junction, in what is now part of North Belmont. The exact spot was probably the crossing between the P&N and what is now called Woodlawn Street.

Greenville, South Carolina (LOST, Figs. 5.42-5.48). Greenville has changed dramatically in the decades since the P&N operated trains out of downtown. The area where the P&N yard and station were once located is not today recognizable as a former railroad facility. The complex was situated parallel to Academy Street and lay on the west side of that street in the block between West McBee and West Washington Streets. In the 1960s, the city began a downtown "expressway" construction project that involved widening Academy Street to four lanes and carrying it across the Reedy River on a bridge. The roadwork was to pass immediately adjacent

to the P&N terminal, and the new bridge was to be built more or less at the point where the yard tracks fanned out as they entered the site. As a direct result of the city's road project, the P&N offered the freight building for sale.

The passenger building at the corner of Academy Street and West McBee Avenue was remodeled in 1967, and the P&N moved its Traffic Department's sales and service office there from the second floor of the freight station, which had also housed the Seaboard Air Line's offline traffic office. Improvements to the passenger building, not used as such since the end of passenger service in 1951, consisted of the addition of a suspended acoustical tile ceiling, rearrangement of partition walls, new paneling, and a new HVAC system. At the same time, the exterior brick was cleaned and painted, exterior doors were replaced, and the parking area improved. The work was contracted to Reece Construction Company of Greenville (with offices today located on Westfield Street).

Today, nothing remains of either building, and a sense of "how things looked" is difficult to convey. The site is now occupied by two buildings: on the south side of West McBee Street, where the small P&N passenger building once stood, is a handsome and shamelessly "Williamsburg-esque" building; one that would undoubtedly powder the very wig of any timetraveling royal governor who chanced upon it. Until 2003 it housed the offices of Duke Power Company and is now occupied by First Citizen's Bank. On the opposite (north) side of West McBee is a parking lot and another former Duke Power building now occupied by the AGFA company. The First Citizen's building is not "squared" to the intersection of Academy and West McBee Streets, but instead faces it at an angle. Only the faintest trace of the P&N remains in the form of the building's front walk, which is oriented to Academy at *approximately* the same angle and in *approximately* the same position as the old P&N passenger platform. As successful and laudable as the rebirth of Greenville's downtown has been, very few of the buildings now present at Academy and West McBee date from the location's days as a hub of rail activity, and thus there are no tell-tale signs of the railroad's presence. Once the site of the largest and busiest terminal on the entire division, the relationship of the site's present use to its former one is not, to say the least, readily apparent.

Greenwood, South Carolina (N/A). At Greenwood, the P&N built a small yard between Cambridge and Mill Avenues. There was no P&N station; rather the P&N used the Seaboard Air Line station, located between Oak and Marion Avenues. The Southern and Atlantic Coast Line stations were a couple blocks away, in what is now the middle of Main Street; all three buildings are now lost.

Greer, South Carolina (REHABILITATED, Figs. 5.49-5.56). The Greer, South Carolina, station is a jewel of a building and as an example of adaptive reuse. It is *the only* remaining P&N station which retains its two story bloc and thus the sole survivor of its type. Although the freight section is similar to the surviving freight section at Anderson, Greer represents the only surviving example of the two story administrative section of any P&N station. It appears to have been rehabilitated with very little interior alteration, except as necessary to subdivide one tenant from the next. These added walls run the full height of the building, from floor to ceiling, but it does not appear that any original walls have been removed. John Sudnick and his wife are among the building's five or six tenants and proprietors of "Mary Annie's Boutique." Mr. Sudnick was kind enough to allow photographs to be taken within his portion of the building

(located in the single-story freight section), and the interior appears to be in as excellent condition as the exterior.

Groce, South Carolina (1924). Location unknown; however there is a "Groce Road" in Lyman. Lyman, by that name, does not appear on the 1924 timetable, so one possibility is that "Groce" and "Lyman" were one and the same. If that is the case, it compounds the mystery surrounding the Lyman depot (below).

Groves, North Carolina (1927, 1928, 1951, Fig. 5.57). Groves is usually listed on timetables as a flag stop; it was near the Modena Mill east of Gastonia, located eight tenths of a mile past the Ranlo spur in the vicinity of the Grover Street crossing.

Hillside, South Carolina (1924). Location unknown.

Hodges, South Carolina (DERELICT, Figs. 5.58-5.64). Identical to its sister stations at Donalds, Piedmont, and Pelzer, the Hodges P&N depot is vacant and somewhat deteriorated. It has not been substantially altered from its original construction. The two interior spaces that are accessible show numerous signs of decay, such as spalling plaster and rotting wood, and although most doors and windows are boarded up, two have been open to the elements for the last three years. The inside of the building is a jumbled mess of cast off furniture, particle board, wooden pallets, and junk and refuse in general. From the outside, the building appears stable physically, except for a small protrusion in the southwest slope of the asphalt shingle roof and a bulging slump in the brick watertable located next to the door and below the windows in the

northeast wall of the passenger waiting room. If one is traveling north from Greenwood on U.S. Highway 178, the Hodges station will be located on the right, just north of the U.S. 178/S.C. 246 junction. Depending on the time of year, it may be partially obscured by foliage, but is visible to the right as one crosses over the bridge that once carried U.S. 178 over the P&N track.

Honea Path, South Carolina (LOST, Figs. 5.65-5.68). The P&N station at Honea Path (usually pronounced HONEY-Path) was a standard design like those at Hodges, Donalds, Pelzer, and Piedmont, although it may have been slightly longer. It was located directly behind the present Honea Path Fire Department, in the middle of the block on Shirley Avenue and just north of Laurel Street.

Hoskins, North Carolina (1924, 1927, 1928, 1951, Fig. 5.69). Located about one mile south of Pinoca Yard at the crossing of Hoskins Road. Nearby was the Hoskins Mill and Hoskins Amusement Park.

Hutchison, North Carolina (1927). Alternatively spelled "Hutcheson," the stop appears on a 1927 topographical map and was located at the point where Rankin Avenue crosses the P&N main line. Today the area is within the town of Mount Holly. Probably named for Charles Egbert Hutchison (1860-1942), who founded and owned several textile mills in the Mount Holly area (Nims Manufacturing Co., Woodlawn Manufacturing Co., Armon Manufacturing Co., Adrian Manufacturing Co., American Processing Co.) that were incorporated in 1920 into the American Yarn and Processing Company, a predecessor of American and Efird. C.E. Hutchison was also one of the P&N's founding directors.

Lakewood or *Lakewood Park*, North Carolina (1927, 1928, 1951). Located between the Mint Street station in downtown Charlotte and the Hoskins Road flag stop.

Locke, South Carolina (1924). The exact location of Locke is unknown, but it may have been in the area of Wadsworth (below), which was the site of a United States Army camp during World War One.

Lowell, North Carolina (LOST, Fig. 5.70). The P&N did have a permanent station at Lowell. Built about 1945-46, it was not a Hook station but did bear some resemblance in its materials and minimal architectural details. There was probably not an earlier station preceding this rather late building; visible in a photograph is what appears to be one the railroad's small wayside shelter boxes used at flag stops (and Lowell was, in fact, always listed on early timetables as a flag stop only), or "passenger landings" as the railroad called them. The exact location of the Lowell station is not known, but the general vicinity is an area bounded by the P&N main line, a spur (now taken up) up to the local mill, and Clay and Poplar Streets.

The Lowell station is now one of the loneliest spots on the North Carolina Division. Several months ago the agency was discontinued and the station was locked up. Even when Agent Terrell was there, it was a lonely spot... now it is even more so.³

Lyman, South Carolina (LOST, Figs. 5.71-5.72). Noticeably absent from a 1919 timetable (USRA Timetable No. 1) and listed as a flag stop by 1927, the P&N station at Lyman was odd in that the station order board signal stood poking through the eave of the trackside roof. The base of the semaphore stood immediately in front of a set of low steps rising to the modest freight platform and would have significantly hampered anyone's attempt to use them. In photographs,

³ Lynch, Thomas G., ed., Semaphore, Vol. 11, No. 9; Charlotte, N.C., September 1955, p. 3.

the semaphore itself does not resemble the earlier Westinghouse model, and the entire arrangement is a puzzling one. It is difficult to imagine that the station was built around the signal, so perhaps the semaphore was added to the site at a later date; however, that still does not explain why it was placed where it was. Another possibility is that the Lyman station started out as a simple shelter similar to the standard shelters planned for Saxon, Paris, and other locations, but was later enclosed, thus requiring that the roof be fitted around the existing signal.

Whatever its origins, like the second Belton station, the Lyman station featured a brick or masonry base with a single-course brick drip mold running below the sills, and it echoed the early P&N stations with its pattern of fenestration. However, above the sills, the exterior walls appear to have been clad in weatherboard. It is doubtful the building ever featured a tile roof, for it appears to have been of later construction than Hook's original stations. Another unusual feature was a small bay in the trackside wall which was covered with the barest hint of a hipped gable roof. It was probably located at a curve in Piedmont Street, just off the Spartanburg Road.

McAdenville, North Carolina (RELOCATED, Fig. 5.73-5.77). McAdenville's small depot was most likely located at the end of the P&N spur into McAden Mills. It is a small building of wood frame construction that originally may have been painted to match existing Hook stations. It is not known if the railroad built, owned, and maintained the building, or if it was the property of McAden Mills. A large painted wooden sign has been added in the past, obviously a gesture of some form of local interest, and proclaims the building to be the P&N's McAdenville depot. The sign, visible from the road, also bears a construction date, but the wall itself is inaccessible and the date was covered by kudzu at the time of visit. The building has been removed from its original site and currently occupies a lot at the base of a cellular telephone tower on Lakeview

Drive in McAdenville. It should be noted, however, that at present this site, too, is threatened. Until very recently it was surrounded by the McAden Mill village, all of which has been razed within the past few months. The building is empty, vacant, and minimally maintained. It is not unique or particularly remarkable, architecturally, but it does have historic significance through its association with the mill and the railroad; its future is uncertain.

McAdenville Junction, North Carolina (1927, 1928, 1951). The point at which a short spur branched away from the P&N main line to reach the town of McAdenville; it was less than half a mile away and thus would have been a flag stop.

Mount Holly, North Carolina (REHABILITATED, Figs. 5.78-5.83). The Mt. Holly station is undergoing rehabilitation as leased office space. A Charlotte area developer, Charles Guignard, purchased the station and its one acre site from CSX Transportation for approximately \$50,000. It appears to be in very good condition from the outside; the roof is of terracotta tile and matches the original. Although the inside is now subdivided, it appears that it the work is being carried out without major alterations to the interior. The building was closed on a Saturday visit, so very little of the inside was visible. At one end of the exterior, however, the earth has been excavated seemingly all the way to the bottom of the foundation, and sealed windows have been added to what once were vents along the foundation that allowed air to circulate under the building. Both alterations seem to be aimed at creating a basement for added space.

News, South Carolina (1919, 1930, 1943). "News" does not appear as a place name on maps, so its exact location is not known. However, according to timetables, it was located about one mile

west of Paris, which would put it squarely within the "Leawood" area, a mill industry area near the grade crossing of the P&N and Furman Hall Road.

North Anderson (UNKNOWN). North Anderson appears on a 1919 USRA timetable as a station stop; however, there is no other reference to it. It may in fact refer to the P&N "Anderson" station under the moniker of "North Anderson" to distinguish it from the nearby Southern Railway station. Timetable mileage between "North Anderson" and "Anderson" is a mere six tenths of a mile; since the USRA's Southern District was controlled mainly by representatives of the Southern Railway, the above scenario is at least plausible. As with all flag stops that appear to have been used only during the period of USRA control, this one is somewhat suspect as a "genuine" P&N stop. Because it controlled multiple railroads, the USRA's operations and use of stations varied considerably from the operations and use of stations by individual railroads acting in their own interests.

Oakvale, South Carolina (1919, 1927, 1930, Fig. 5.84). Located south of Greenville between White Horse and Golden Grove; probably in the general vicinity of a place now shown on topographical maps as "Lakeside," just south of Interstate 85 and near the junction of the Southern Railway's branch line to Gantt.

Ozark, North Carolina (1927). Served the same mill area as "Groves" (above) – located six tenths of a mile from the Groves stop, probably near the North Modena Street crossing.

Paris, South Carolina (1919, 1927, 1930, 1943, Fig. 5.85). Paris is a small community east of Greenville, at the foot of "Paris" Mountain. The exact location of the P&N stop or shelter is unknown.

Pelzer, South Carolina (DERELICT, Figs. 5.86-5.94). Unfortunately, the P&N station at Pelzer is in a most pitiful and advanced state of disrepair. The roof (which, ironically, still retains its original tile) and walls have been severely compromised; the former has caved in at the intersection of the peak in the primary roof and that of the small cross gable over the stationmaster's office, while several of the latter (both exterior and interior) have had very large (approximately six feet or more in diameter) holes knocked in them. Additionally, doors and windows are either open to the weather, broken, or missing altogether. The beadboard ceilings, which were used in the waiting room and office spaces and were so typical of early twentieth century construction materials, have almost completely collapsed as a result of water damage. Overall, there is quite a bit of daylight showing through the building.

The track is still used by CSX Transportation – much as it was before by the P&N – to deliver coal to the Lee Power Plant, outside of Pelzer on the Saluda River. CSX is reportedly willing to sell the building, but only on the condition that it be removed from the site, a project which not only would compromise the historical integrity of the building, but also one which, in light of its brick construction and current structural condition, would probably be beyond the capability of Pelzer's modest budget. For the time being, the station stands two blocks off South Carolina Highway 8 on Lyman Street, just south of a concrete-lined cut through which the CSX tracks pass. Before they were removed, the Southern's parallel spurs into Pelzer Mills crossed

the P&N here at a "diamond" crossing protected by a wooden gate, or "smashboard," also now lost.

Piedmont, South Carolina (DERELICT, Figs. 5.95-5.101). Slightly longer than most of its sister stations (it has two freight doors on either side as opposed to one), the Piedmont station is derelict, although it appears to be in use as storage for an adjacent building supply company. It retains its original tile roof, although that is significantly damaged in some areas - most particularly along the eave line, where it appears that large trucks backing up to the freight doors may have struck the eaves. The site is a bit cluttered and is especially overgrown on the track side (east) of the building. Several windows are broken, and the original west door into the waiting area has been enlarged to accommodate tall metal freight doors. Most significant are two very long cracks in the west wall, located between the original freight doors and running from ground level to roof. These may be further evidence of trucks backing into the building; they clearly point to a weakening of the physical stability of the building. In addition, there is moderate ground-level deterioration of the brick on the same side of the building. The Piedmont station is located off South Carolina Highway 20, between East Main Street and South Carolina Highway 86. The P&N closed the agency at Piedmont at the close of business on January 31, 1967, which coincided with the retirement of stationmaster R.D. Alexander.

Pinoca, North Carolina (N/A, Fig. 5.102-5.105). Variously pronounced, the name is a corruption of Pinoc*o*, which is itself a contraction of "**Pi**edmont and **No**rthern **Co**mpany." Probably as a result of dialectic pronunciation, the "o" gave way at some point to an "a." That a local place name is derived from its railroad appellation is not unusual; Burlington, North

Carolina was originally called "Company Shops" because it sprang up around the North Carolina Rail Road shops located there in the 1850s. The P&N located its North Carolina division shops at "Pinoca" and the name stuck. Also, the company built a freight yard here for interchanging traffic with the Seaboard Air Line. Pinoca appears on all timetables, but, as with "River Junction," South Carolina (which had a similar function), its significance as a stop was derived from the numbers of railroad-related activity. There was a building constructed here in the 1920s that housed the yard office and a freight shed, but, judging by the blueprints, it was designed and built by the railroad's own engineers and never intended to serve as a passenger station. Part of the wayside shelter for passengers is visible in an early photograph.

Ranlo, North Carolina (N/A). According to P&N historian Thomas Fetters, the P&N interurban trains did not travel the one mile or so from the P&N main up to the Ranlo Mill (although their freight switchers did); rather, the Gastonia trolley cars ran out from Gastonia on the P&N main line and stopped at a small shelter at the mill. That shelter was "made of brick with concrete seats facing two ways,"⁴ and thus would have been similar in appearance to the standard plans for shelters at Saxon, Paris, News, and Clairmont (described above). There may also have been a similar shelter at the junction between the P&N main line and the Ranlo spur (at the intersection of East Ozark Avenue and Spencer Mountain Road). Ranlo is sometimes listed as a flag stop only.

Rays, North Carolina (1927). Shown as "Ray" on a 1927 topographical map, this stop was located at the crossing of the P&N and Hickory Grove Road (also "McAdenville Road"), just outside of McAdenville.

⁴ Fetters, Thomas, interview October 21, 2005.

Rhyne, North Carolina (1927). Rhyne probably did not have a permanent station; almost certainly it would not have had a Hook station. Although a simple wood frame depot could have been erected later (i.e., during the 1920s), it would have been easier and cheaper for the railroad to erect a basic shelter instead. "Rhyne" is located at the intersection of N.C. Highway 27 and Rhyne Road.

River Junction, South Carolina (N/A, Figs. 5.106-5.109). River Junction was the name given by the P&N to the point at which it crossed the Reedy River. The railroad located its South Carolina Division shops here as well as the division offices. The site is roughly one mile from downtown Greenville and was at one time a rather busy intersection of railroads; here the P&N, the Greenville and Northern (G&N), the Atlantic Coast Line, and the Southern Railway all met, crisscrossed, and interchanged cars with each other as they individually made their way into various parts of town. River Junction is always listed *pro forma* as a station stop, but, like Pinoca on the N.C. division, the fact had more to do with the fact that it was a nexus of operational railroading activity. It probably offered a small shelter.

Saxon, South Carolina (1919, 1927, 1930, 1943, Figs. 5.110 and 5.111). Located just to the west of Spartanburg, Saxon was the site of the Saxon Mill. The P&N either designed a shelter for Saxon or approved a design submitted by the mill. It is not known whether the shelter was built (although it probably was) or its exact location, but it would have been in the vicinity of the P&N's grade crossing with Front Street.

Shoals Junction, South Carolina (N/A). Shoals Junction was a bit unusual in that, although it was usually listed as a "station stop," it never had a station. Shoals Junction was so named because it was here, along the top of a low ridge well suited to railroad grades, that both the P&N and the Southern connected to the Ware Shoals Railroad, which ran for five miles down to the mill town of Ware Shoals, South Carolina, situated on the Saluda River.

Snoddy (also *Snoddy's* or *Snoody*), South Carolina (1924, 1930). Located a mile or two east of Tucapau, approximately where the Interstate 85/U.S. 29 interchange is today.

Sodyeco, North Carolina (UNKNOWN). Listed on a 1951 timetable, the "**Southern Dyestuff Company**" on the opposite side (east) of the Catawba River from Mount Holly. The 1951 timetable does not distinguish between station stops or flag stops (it was one of the last to be issued during the P&N's passenger service). As described above for the "Beattie" stop, as a mill and large single employer, Sodyeco may have warranted the construction of a shelter or depot, but such a building might well have been the property of the mill rather than the railroad.

Spartanburg, South Carolina (LOST, Figs. 5.112-5.118). Spartanburg had a somewhat unusual station in that only the two-story portion of the standard design seems to have been built. It was constructed abutting a three-story warehouse which probably already occupied the site and which would have suited the railroad's freight needs. A platform was either built or modified along one side of this building, and the two-story P&N work functioned in its usual capacity as an office. It may have also headquartered the passenger facilities as well, but passengers actually boarded and disembarked from a small wooden platform shelter located directly across several yard tracks

from the two-story yellow and red brick office. At the rear of this platform, the track extended along the Ezell Street side of another large warehouse building. A large freight door cut into this end of the building served as the express freight office for passenger trains. When an interurban train was backed up to the platform, an express boxcar coupled to the end would fall into alignment with the freight door in the hotel for unloading and loading. The two-story building was located on the corner of Daniel Morgan Avenue and West Saint John Street; it was demolished in the early 1980s. The passenger platform ran parallel to Ezell Street and was accessible from Spring Street. Today the site is occupied by a parking deck.

Spencer Mountain, North Carolina (1924). Spencer Mountain is listed only once as a point served by the P&N. It would have been located at the end of the Ranlo Mill spur, literally at the foot of Spencer Mountain.

Sub-Station (LOST, see also "Belton"). The name actually refers to the second of two stations built at Belton (described above), but it may be derived from an electrical substation as well. P&N trains operated on 1,500 volts direct current, while the power company's transmission lines carried a higher voltage in alternating current. To feed the railway catenary system, the P&N utilized between eight and eleven substations, each of which could automatically convert 2,200 volts AC into 1,500 volts DC and supply it to the catenary wires.⁵

⁵ One of the most interesting and unique pieces of equipment on the P&N was the Westinghouse portable substation. There were several of these cars, each about the size and shape of a caboose, that could be positioned anywhere along the line where extra "juice" was temporarily required, such as when repairs were being made to a permanent substation, or in cases where an overloaded current caused a drop in line voltage. Each portable unit could provide the same voltage DC as a fixed substation.

Taylors, South Carolina (LOST, Figs. 5.119-5.122). Similar in plan to the second Belton station, Taylors was a wood frame building painted to match the color of the earlier stations and further traced its lineage to them through the modest effigies of paired cornice brackets. The P&N closed the agency it housed in March of 1966 and leased the property around January of the following year. It was located at the end of North Adams Street in Taylors, on the east side of Greenville.

Thrift, North Carolina (STANDING, Figs. 5.123-5.126). Located on Old Mount Holly Road between North Carolina Highway 27 and Moore's Chapel Road, Thrift is an exceptionally well documented P&N station. It was the subject of a thorough report written in October, 1982, by the Charlotte-Mecklenburg Landmarks Commission. The Thrift station served the Thrift Mill (later renamed Kendall Mill) and crossroads community of Paw Creek. After the end of passenger service, the railroad leased part of the building and property to Emulsified Asphalt Refining Company, which used it for storage. Emulsified continued to lease it after the merger with Seaboard Coast Line, which discontinued using the building as a depot around December 1969 or January 1970 (coinciding with the closure of the Kendall Mill). It continues to be used, apparently, by an asphalt or fuel storage company. Currently it is fenced off from public access, so it is difficult to ascertain its current structural condition. The site is extremely overgrown, but visible areas of the building appear to be in good condition for a building that has stood empty (or has been, presumably, also used for storage) for decades. The Thrift station is a locally designated historic landmark.

Toddville, North Carolina (1927). Located west of Pinoca Yard, probably at the crossing of Toddville Road between Pinoca and Thrift.

Toxaway, South Carolina (1919, 1930, 1943). Toxaway is a small mill community on the immediate outskirts of Anderson. After it crossed the Rocky River, the P&N main line divided here at a wye and a branch ran around the south side of Anderson to connect with the Atlantic Coast Line.

Tucapau, South Carolina (LOST, Fig. 5.127). Tucapau (TUCK-a-paw) was officially renamed "Startex," after the local Star Textile Company, on October 1, 1949. The official reason given for the change was that locals wanted to draw business to the small mill community and thought "Tucapau" difficult for outsiders to pronounce and thus inadequate to the task. A single photo of the Tucapau/Startex station reveals that it was indeed a Hook building, identical to the standard combination stations at Thrift (North Carolina), Hodges, Donalds, Pelzer, and Piedmont (South Carolina). It was located either at the diamond crossing between the P&N and the Southern (Tucapau, proper) or further down Tucapau Road (Main Street) within Startex. There was a P&N siding and a "smashboard" (a white gate that was manually swung to block either the P&N track or the Southern track) at the diamond, both clues which the diamond seem a likely site. However, another possibility is the point at which the spur into the mill crossed over Main Street. This station alone is largely responsible for the inclusion of flag stops in this catalog; had it not been for a timely discovery in *Semaphore*, the P&N company magazine,⁶ research would not otherwise have revealed it to be a Hook building. The mill closed shortly after the approval of the North American Free Trade Agreement (NAFTA), and Startex today is a virtual ghost town.

⁶ Semaphore, January, 1948.

190

It was never large to begin with, and so one would not expect to find a Hook station there. The fact that there was, however, is a factor one must keep in mind before dismissing similarly small, out of the way, or otherwise "insignificant" locations on the P&N.

Wadsworth, South Carolina (LOST). During World War One, the United States Army established several training camps in the Spartanburg area. One of these – Camp Wadsworth – was served by a spur off the P&N main line. As an army camp, it generated large numbers of riders and thus, at least until war's end, had some kind of temporary platform shelter. Wadsworth does not again factor into P&N operations until the 1950s, when the railroad began developing the area as an industrial park.

Watkins, South Carolina (1919). The location of this stop is unknown. Timetable mileage places it about two miles west of the Campbells flag stop and about two to three miles east of Anderson. As with all flag stops that appear to have been used only during the period of USRA control, this one is somewhat suspect as a "genuine" P&N stop. Because it controlled multiple railroads, the USRA's operations and use of stations varied considerably from the operations and use of stations by individual railroads acting in their own interests.

White Horse, South Carolina (1919, 1927, 1930, 1943, Figs. 5.128 and 5.129). Just on the southern outskirts of Greenville, near the fairgrounds, White Horse was simply the point where White Horse Road crossed the P&N tracks. Although it apparently never had a station, it survived longer than most other flag stops. In the 1950s, the P&N began developing the area as

part of its industrial development program; today it is one of the largest industrial areas in Greenville.

Williamston, South Carolina (LOST, Figs. 5.130 and 5.131). Except for its appearance on a single track chart contained in P&N records held by the University of North Carolina at Charlotte, all other traces of the P&N station at Williamston have been lost. It may well have been another of Hook's stations, or it might have been a much simpler affair, since there was a Hook station only two miles north, at Pelzer. There is one photo of a building said to be the P&N's Williamston station, and another photo in *Semaphore* where the building may be visible in the background. Today the Williamston site has become overgrown. Longer-than-usual crossties indicate the location of a now-removed turnout and siding in the vicinity of, appropriately enough, Depot Street.

ILLUSTRATIONS

Figure 5.1 (following page): A typical plan for a single-story Piedmont and Northern combination station. Stations known to have been built using this standard plan were located at Donalds (S.C.), Hodges (S.C.), Honea Path (S.C.), Mount Holly (N.C.), Pelzer (S.C.), Piedmont (S.C.), Thrift (N.C.), and Tucapau (S.C.). NOTE: The "Freight Office" may have served instead, always or at times, as the "colored" waiting room.





ANDERSON, S. C., FREIGHT STATION

Figure 5.2: A c. 1924 photograph of the Anderson freight station showing the Federal Street end of the building. As originally built, it was identical to the large stations at Charlotte and Greenville. Photo courtesy of Thomas Fetters.



Figure 5.3: The Anderson freight station in February, 1958; the two-story bloc which stood at the near end was removed by the P&N for unknown reasons. It may have been damaged in a fire about 1950. Based on the fact that the first floor windows in this photograph appear to be original, it looks as though the second floor of the office section was removed and the first floor incorporated into the outline of the freight section.



Figure 5.4: October 5, 2005. The freight station today.



Figure 5.4: The inside of the Anderson freight agency, July 16, 1949.



PASSENGER STATION, ANDERSON, S. C.

Figure 5.5: The Anderson, South Carolina passenger station, as it appeared about 1924. Photo courtesy of Thomas Fetters.



Figure 5.6: October 5, 2005. The Anderson passenger station today, now used by the Jones Law Firm. Note the wall on the right side of the building and that a similar wall, visible in an early photograph (above, Fig. 5.3) has been removed from the left side.



Figure 5.7: October 5, 2005. The rear of the Anderson passenger station (two story brick building with shed roof at left). In the center (between the bushes) is a short length of track to suggest the building's original role; the freight station is out of view to the right.



Figure 5.8: Track chart showing the arrangement of the P&N's Anderson terminal. The passenger station is the small square building at top center (at the end of a pair of tracks); the freight station is the long rectangular building below and to the right, parallel to Murray Avenue. Track chart held by the University of North Carolina at Charlotte, Atkins Library, Manuscript Collection Sixteen.



Figure 5.9: October 15, 2005. The Belmont, North Carolina, station is unique in its design, although its color and choice of material is the same as for other P&N stations designed by C.C. Hook.



Figure 5.10: October 15, 2005. The passenger end of Belmont Station, now occupied by a boutique.



Figure 5.11: October 15, 2005. Detail of Belmont's unusual bay window.



Figure 5.12: October 15, 2005. The freight section. It appears that Belmont was built *without* a trackside platform; note that the roof overhang of the freight warehouse is much shallower to accommodate the "spotting" of freight cars in front of the freight door. A ramp (not shown) leads up to the deck of the concrete platform nearest the camera, and another unusual feature is the presence of a freight door – which appears original – in the end of the freight house. One reason for these departures from the "standard" layout of P&N stations may be the limited physical space around the station. Originally the P&N tracks continued across Main Street (at left) and joined the main line of the Southern Railway within a matter of yards. For the P&N, Belmont was located at the end of an approximately four-mile long branch, and there may have been no room for additional tracks at the station.



Figure 5.13: October 15, 2005. The P&N's "forked lightning" herald was a distinctive and dynamic feature under the center peak of the gable end of most (perhaps all) Hook stations. This one shows the intricate mosaic of small ceramic tiles that composed the design. Unfortunately, this lovely detail is somewhat obscured by the sign for the shop now housed in the building (hence the oblique angle at which it is shown).



Figure 5.14: October 15, 2005. The interior of the Belmont station has been painted, but the shop's proprietress maintains that no other alterations were made when she took over the lease from the museum. An examination of doors and walls bears out that claim, but the doors to the outside that are located on either side of this archway suggest that at some point there may have been a solid wall dividing this end of the building. The view here is toward the track and the grade crossing at Main Street. The former stationmaster's office is through a doorway out of view at the near left.



Figure 5.15: The interior of the stationmaster's office at Belmont around August or September, 1948. Left to right are J.P. Johnson, warehouseman; Lennie Featherstone, secretary; J.B. "Johnnie" Johnson, stationmaster, and Gerald M. White, deliveryman.



Figure 5.16: The P&N's downtown station is circled in yellow in this aerial view of Belton, South Carolina. The tracks serving it enter from the right. "Sub-Station," or the second P&N station, is out of view to the right, just past Belton's distinctive concrete standpipe. On the opposite side of Main Street is the Southern Railway station (circled in black), situated in the middle of the wye where the Southern's line to Anderson separates from the line between Greenville and Greenwood. Both P&N buildings are now lost, although the Southern station still stands and is used as a community center or visitor's bureau.



Passenger Station at Belton, Typical of Such Structures on the P. & N. System

Figure 5.17: A very early (undated) view, looking towards downtown, of the Belton "sub-station" located on O'Neal Street (visible at right). Photo courtesy of Thomas Fetters.



Figure 5.18: A later view of the Belton passenger station, this one taken sometime after the P&N's absorption by Seaboard Coast Line (note the "SCL" sign at the near corner of the building). Photo courtesy of Thomas Fetters.



Figure 5.19: October 5, 2005. The same site today.



Figure 5.20: This oddly cropped (for use on a cover of *Semaphore*) aerial shot presents a remarkably complete view of the P&N's Charlotte, North Carolina, facilities. In the center is, of course, the large main building designed by C.C. Hook. At upper left is the smaller L-shaped passenger building with a trackside platform. Also at left the wide concrete "automobile platform" is visible – used for unloading automobiles, which were shipped on flatcars and boxcars in the days before the advent of specially designed multi-deck freight cars to handle the job. Photo courtesy of Thomas Fetters.



Figure 5.21: This summer, 1916, photograph appeared in the September, 1945, issue of *Semaphore*. Lined up along Mint Street are about two dozen automobiles, a portion of what was, at the time, the largest single shipment ever received in Charlotte.



Figure 5.22: Passengers board their train at the Charlotte passenger station. The large building in the background is the Charlotte post office. Photo courtesy of Thomas Fetters.



Figure 5.23: After leaving the passenger building (background right), P&N interurbans used the Mint Street trolley tracks to round the freight station (left). Photo courtesy of Thomas Fetters.



Figure 5.24: An inbound train leaving Mint Street and crossing Third, heading to the passenger station.



Figure 5.25: The passenger station on Fourth Street is absent in this c. 1931 track chart showing the layout of the Mint Street terminal and some of the P&N's Charlotte customers. Although it is not labeled as such, the freight station was presumably still serving passengers at this time. Track chart held by the University of North Carolina at Charlotte, Manuscript Collection Sixteen.



Figure 5.26: October 16, 2005. Although not a station, the steel "Chick Springs Bridge" is a significant landmark of engineering nonetheless; at eighty feet tall and about nine hundred feet long it is the longest and tallest bridge on the former P&N.



Figure 5.27: An undated (but very early) photograph of the Donalds, S.C. station. Note the "PN" monogram-style logo in the gable over the stationmaster's bay.



Figure 5.28: A trackside photograph of Donalds probably taken during its period of ownership by Seaboard Coast Line (the tracks have not been removed). Photo courtesy of Thomas Fetters.



Figure 5.29: October 5, 2005. The former P&N station at Donalds, South Carolina, is proudly owned by Mrs. Laura Johnson, who lives next door (out of view to the right). Mrs. Johnson and her late husband bought the property from the Seaboard Coast Line.



Figure 5.30: October 5, 2005. A profile view of the Donalds station.


Figure 5.31: October 5, 2005. Detail of freight door, Donalds.



Figure 5.32: October 5, 2005. Detail of door to stationmaster's office, Donalds.





Figure 5.34: October 5, 2005. Window and transom detail, Donalds.



Figure 5.35: October 5, 2005. Interior, stationmaster's office, Donalds. The small window in the left wall (bricked up) served as an annuciator communicating with the passenger waiting room.



Figure 5.36: October 5, 2005. Ramp from the stationmaster's office up into the freight warehouse; the freight and express office is to the left of the pipe railing.



Figure 5.37: Interior, freight office (or segregated waiting room), Donalds. The small window in the wall, center, communicates with the stationmaster's office. This space was originally separated from the warehouse (from which the photograph was made) by a non-load-bearing brick partition wall, which collapsed during the Johnsons' early work on the building.



Figure 5.38: October 5, 2005. Framing, roof joists, and attic vent detail, Donalds.



Figure 5.39: Track chart from about 1931 depicting the P&N's Gastonia terminal. Note the small building marked "P&N PASS STATION" toward the lower left, on the corner of Franklin Avenue and Broad Street. This station is situated on a spur of the Gastonia trolley line, while the building marked "P&N FREIGHT STATION" is actually on the P&N. Railroad operating agreements are sometimes very complicated, and may not even have any bearing upon this case, but given the smaller building's location, it may have been intended to serve the local trolleys more than the interurban trains. Gastonia trolleys were painted in P&N colors and lettering, and the service was subsidized by the P&N, but it operated somewhat independently. Gastonia's trolley service ended September 21, 1948, and not long after the trolley tracks were removed from Franklin Avenue (now Franklin Boulevard) as part of the United States Highway 29 project through downtown Gastonia. Track chart held by the University of North Carolina at Charlotte, Manuscript Collection Sixteen.



Figure 5.40: This aerial view of the P&N station at Gastonia is undated, but appeared on the cover of the August, 1950, issue of *Semaphore* Magazine. Note that the small passenger station shown the track chart above (Fig. 5.39) is missing; one of the buildings that has taken its place is – ironically – a gas station.



Figure 5.41: October 15, 2005. The back of the "Shrimp Boat" restaurant is visible at left; C.C. Hook's building for Gastonia would have stood approximately where the dumpsters are (to the right of the restaurant). Not only has the P&N station been lost, but other buildings that once stood here have disappeared as well – and yet nothing has replaced them; the entire site is now simply a large field.

Figure 5.42 (following page): Track chart of the Greenville terminal c. 1931. As with the track chart of Charlotte, there is no "satellite" passenger station. It would be built on the West McBee side of what is shown instead as the "Public coal chute." Note the loading platforms and the service tracks entering the basement level areas of buildings fronting West Washington Street. The track running down Academy Street leads to the downtown trolley tracks on which P&N interurban trains were once turned. The Southern Railway freight station would be just off the diagram to the right; it, too, is lost. University of North Carolina at Charlotte, Manuscript Collection Sixteen.





Figure 5.43: At right is the passenger station, with its unique angled platform. The freight building is just behind the interurban car. Note the small portion of the building circled in red. Photo courtesy of Thomas Fetters.



Figure 5.44: October 20, 2005. Approximately the same view, from the front steps of the First Citizen's Bank. Note the area of the building circled in red and compare to Figure 5.42.



Figure 5.45: The platform on the Academy Street side of the Greenville freight station appears to have been very busy the day this picture was taken. Photo courtesy of Thomas Fetters.



Figure 5.46: A carman swings up as an outside braced P&N boxcar is pulled out of the freight station in this view looking more or less up West McBee towards downtown. Photo courtesy of Thomas Fetters.



Figure 5.47: The Greenville passenger station at the corner of West McBee (foreground) and Academy (left) Streets was a later addition to the downtown terminal, but it still paid some homage to its ancestors with its tile roof, lightning bolt herald (this one of cast concrete), and fenestration.



Figure 5.48: If the Greenville freight station stood today, on what is now the site of the AGFA parking lot, it would look *approximately* like this – facing West McBee (foreground) and Academy (out of view, right).



Figure 5.49: A postcard view of the Greer, South Carolina, station.



Figure 5.50: An early photograph taken from a similar angle. Photo courtesy of Thomas Fetters.



Figure 5.51: October 20, 2005. The site today.



Figure 5.52: October 20, 2005. The Greer station in profile.



Figure 5.53: October 20, 2005. Interior of what is becoming a boutique; the freight section has been subdivided longitudinally by what appear to be simple wood frame partition walls, but much of the building's original material is intact; for instance, the floors, which have had spot repairs made but are largely original.



Figure 5.54: October 20, 2005. Detail of roof framing; note placement of fluorescent lighting.



Figure 5.55: October 20, 2005. The two story block at Greer is the only remaining example. Interior photographs were taken in the space directly behind the white Ford. Aside from the red watertable, the choice of color for the building's trim is not in keeping with the original color of doors, windows, cornice brackets, etc. The dull gray mutes what few details Hook relied upon to "show off" the building.



Figure 5.56: October 20, 2005. The two-story bloc is slightly different from the larger versions used for stations at Charlotte, Spartanburg, Greenville, and Anderson, but the overall look is the same. Greer features windows in threes rather than four approximately evenly spaced windows.



Figure 5.57: Gastonia trolley car No. 4, painted and lettered for Piedmont & Northern, picks up a fare at Groves, North Carolina. All P&N flag stop signs were similarly painted. Photo courtesy of Thomas Fetters.



Figure 5.58: The Hodges, South Carolina, station, c. 1986.



Figure 5.59: October 5, 2005. Hodges today.



Figure 5.60: October 5, 2005. The freight section at the south end.



Figure 5.61: October 5, 2005. The "bay" of the stationmaster's office at the north end. Door at right enters the passenger waiting room; door at left (standing open) enters the freight/express office.



Figure 5.62: October 5, 2005. Concrete bench built into the north wall of the waiting room.



Figure 5.63: October 5, 2005. Detail of interior damage shows the "layers" of the south wall of the express office. Note the unusual brick bond.



Figure 5.64: October 5, 2005. Profile of the Hodges station from the west.



Figure 5.65: Honea Path, South Carolina. Photo courtesy of Thomas Fetters.



Figure 5.66: View from the south of Honea Path station. Photo courtesy of Thomas Fetters.



Figure 5.67: October 5, 2005. Similar view of the site today; the station stood within the area of the playing field.



Figure 5.68: Track chart showing the placement of the Honea Path station and surrounding buildings. University of North Carolina at Charlotte, Manuscript Collection Sixteen.



Figure 5.69: June 24, 1947. The Hoskins Road flag stop, just west of Charlotte. Note that the sign post near the track is taller and the top is painted red; this may have helped the engineer judge his stop.

Figure 5.70 (following page): A group of photos of the Lowell, North Carolina station appeared in the September, 1947, issue of *Semaphore*. The small wooden "hut" in the top right photo is the passenger shelter.



OUR NEWEST STATION BUILDING

Our newest station building is at Lowell, N. C., where George T. Terrell is agent. Top pictures show the front and rear view of the station building, with Mr. Terrell in the foreground.

Bottom—left: Mr. Terrell standing by his truck with which he performs our pick-up and delivery service at Lowell. Right: Mr. Terrell is shown handling freight between our station and a railroad car.

Mr. Terrell first began working for the P. & N. on December 10, 1917, and was promoted to agent at Thrift, N. C. in December, 1919.

(Photos were made by "Nat" Fisher of the General Offices)



Figure 5.71: The Lyman depot and agent A.C. Maddox appeared in the September, 1948, issue of Semaphore.



Figure 5.72: The Lyman station made another appearance in *Semaphore* in April, 1957. The smokestacks of the Lyman Printing and Finishing Company are visible in the background, so the street behind the building is probably Piedmont Street. Thus the building would have stood just off Spartanburg Road.



Figure 5.73: October 15, 2005. The humble McAdenville depot. It has been relocated from an unknown original site and now sits in an area again threatened by development. Out of view in the background, the old mill village has been razed, and new asphalt, lot numbers, and white PVC are a sign of things to come soon.



Figure 5.74: October 15, 2005. View of the "office" end of the building.



Figure 5.75: October 15, 2005. Interior of the freight room, McAdenville. Note the door at left in the far wall.



Figure 5.76: October 15, 2005. Interior of the "office." At right, blocked by the added cubbyholes, is the door into the freight room.



Figure 5.77: October 15, 2005. Like moss on a tombstone, the kudzu is reclaiming for the earth this sign left for posterity. Although the construction date is obscured, the right side of the bottom line *may* read, "Altered 1978."



Figure 5.78: May, 1950. A rare color photograph of a P&N station – this one at Mount Holly, North Carolina. "No orders" is indicated by the semaphore arm, pointed down, so car No. 2103 can continue on its way toward Charlotte. Photo courtesy of Thomas Fetters.



Figure 5.79: October 15, 2005. Today, the Mount Holly station appears to have a secure future. Although it has been necessarily altered, the changes are, for the most part, slight, and at least from the outside it would appear that the rehabilitation work is being carried out with great care.



Figure 5.80: The west end of the Mount Holly station. Photo courtesy of Thomas Fetters.



Figure 5.81: October 15, 2005. Similar angle of the west end of the building today.



Figure 5.82: October 15, 2005. The streetside view of the station.



Figure 5.83: October 15, 2005. The earth has been excavated from the west end of the building apparently to create additional space for lease. Note the sealed windows below ground level in the foundation wall. Other ground-level air vents have been similarly filled. There is evidence of moisture problems (it may, however, date from before the rehabilitation and conceivably have led to the excavation at this end). With the care given to the rest of the building, this alteration is somewhat perplexing; it seems to reflect a "numbers-driven" philosophy of rehabilitation. Enclosing this space may prove to have no negative effects on the building, but it goes against the instincts of some preservationists.

Figure 5.84 (following page): In an unusual photograph where *all* the subjects are named, shown here building the Oakvale passenger landing are (from left to right): Toy Babb, Coon Carter, John Jones, Homer Babb, Melvin Reece, Sim McColough, Jake McColough, Joe Smith, Arther Berks, Henry Huff, and D.A. Campbell (Foreman). The photo dates to 1912 and appeared in *Semaphore*, September, 1946.





Figure 5.85: The caption for this photograph in the Fetters and Swanson book describes this as the "Suber" shelter near Paris, South Carolina. While there is a crossroads community named "Suber," it is some miles away from Paris, on the other side of Taylors. Nor is "Suber" listed on any available timetables. Paris, on the other hand, is listed, so this may well be the Paris flag stop.



Figure 5.86: The station at Pelzer, South Carolina, during better days. Photo courtesy of Thomas Fetters.



Figure 5.87: A nice, unobstructed view of the Pelzer station. In the right foreground is the "smashboard" at the Pelzer Mills diamond, shown set against the Southern Railway.



Figure 5.88: October 5, 2005. The Pelzer station today – crumbling, overgrown, and vandalized.



Figure 5.89: October 5, 2005. Pelzer interior, north view.



Figure 5.90: October 5, 2005. Pelzer interior, south view.


Figure 5.91: October 5, 2005. A very large section of the trackside wall has been knocked out, revealing a cross-section of the brick construction.



Figure 5.92: October 5, 2005. A collapsed interior wall shows the raised floor and heavy joists of the freight room.



Figure 5.93: October 5, 2005. Interior of the waiting room, Pelzer.



Figure 5.94: Track chart of the Pelzer depot and neighboring structures, c. 1931. Only the depot remains. University of North Carolina at Charlotte, Manuscript Collection Sixteen.



Figure 5.95: Piedmont, South Carolina. The characteristic P&N semaphore is missing; this photo was probably taken after the merger with Seaboard Coast Line.



Figure 5.96: October 5, 2005. Piedmont, South Carolina.



Figure 5.97: October 5, 2005. Trackside elevation of the Piedmont station.



Figure 5.98: October 5, 2005. The passenger end (north) of the building.



Figure 5.99: October 5, 2005. The freight end (south) of the building.



Figure 5.100: October 5, 2005. The west wall shows signs of structural failure, most significantly in the form of cracks such as these which run from ground to top sill.



Figure 5.101: Track chart of the Piedmont property. University of North Carolina at Charlotte, Manuscript Collection Sixteen.



Figure 5.102: Flag stop at Pinoca Yard, North Carolina; the passenger landing is partially visible at left.. Photo courtesy of Thomas Fetters.



Figure 5.103: Pinoca shops, late 1950s, looking towards Charlotte. In the left foreground is the sand tower, used for getting sand into locomotive sandboxes. Fine grain (to reduce wear on the rails) sand has always been carried on locomotives to limit wheelslip and gain traction under slippery track conditions (such as the snow and ice seen here).



Figure 5.104: Interior view of the main shop looking west, about a year after it was completely remodeled for diesel maintenance. Note the height of the horizontal braces in the superstructure; these would be too low to accommodate the much taller locomotives in use today. Office and storage rooms are on the right; the remodeling was designed and carried out by the architectural and engineering firm of J.N. Pease & Co. (which took the photo), Charlotte. *Semaphore*, November, 1955.

Figure 5.105 (following page): Blueprint, probably drawn by the P&N's engineering and maintenance of way department, for a transfer shed built at Pinoca, c. 1926-1931. The building was probably demolished in 1956 to make room for extra yard track; in November, 1956, the *Semaphore* carried a photo of the then-new yard office. UNCC, Manuscript Collection Sixteen.





Figure 5.106: October 20, 2005. The P&N's "River Junction" shops in Greenville, South Carolina. The building immediately behind the tank cars is the original shop building; note that it matches Hook's stations in color, material, and to some extent in details. Windows are paired much as they are in the stations.



Figure 5.107: October 20, 2005. The back of the River Junction complex. Today, the shops are the home of Republic Locomotive Works, which was founded by a former P&N employee.



Figure 5.108: The River Junction Shops were always the P&N's main shop facility. In this interior view from about 1935, probably of the original shop building (note the windows), the car on the right is the former business car *Catawba*, which is nearing completion as a first-class fare parlor car. Its original open observation platform has been enclosed and it has been given a "boat tail," inside of which are parlor chairs.



Figure 5.109: The front of the River Junction shops in the 1950s; the building on the right is the original shop building (preceding photos). Tucked beside it on the left is the P&N's other business car, *Carolina*.



Figure 5.110: This plan, dated February 27, 1914, calls for an architecturally distinctive shelter to be built at Saxon, South Carolina. It appears to have been drawn up within the P&N's engineering and maintenance of way department. Courtesy of Thomas Fetters.



Figure 5.111: This plan, dated a mere four days later, shows a similar plan intended for Paris, News, and a place called "Clairmont." The marginal notes include the words "revised original," and it may be a revision of the plan in Figure 4.108 (above). It is more similar, architecturally, to the larger stations by C.C. Hook. Note also that both plans refer to these buildings as "stations," though neither offers anything more than an enclosed waiting room. There are no baggage or freight areas and there is no stationmaster's office. It is not known how many, if any, shelters of this type were built, but the Ranlo, North Carolina, shelter, was very similar to this design. Courtesy of Thomas Fetters.



P. & N. FREIGHT STATION AND WAREHOUSES AT SPARTANBURG, S. C.

Figure 5.112: This c. 1924 view of the Spartanburg, South Carolina station seems to be the only one in existence that presents a view of the building that is neither somehow obstructed nor a partial view. Taken from the intersection of Wofford and Choice Streets (now St. John Street and Daniel Morgan Avenue, respectively), it clearly shows how the standard P&N design could be adapted to a particular site: in lieu of the typical single-story warehouse section, the railroad here opted to use existing space in the adjoining building. Two stories face Wofford Street, left, while three in the rear face the freight terminal yard. Note the ramped service drive into the basement level. Photo courtesy of Thomas Fetters.



Figure 5.113: October 20, 2005. The site today is occupied by the "QS-1" building, the exterior of which has little to say about its interior goings-on. It houses a medical software design firm and is considered by some to be a model of good design and "environmental engineering."



Figure 5.114: Lunch in hand, a crewman swings onto the pilot of RS-3 No. 1606 as it leaves the terminal yard at Spartanburg. The three story height of the large warehouse in the background makes the P&N facility appear quite large. Photograph appeared on the back cover of the October, 1957 issue of *Semaphore*.



Figure 5.115: On the opposite side of the yard from the main building, the passenger platform extended along the end of another multi-story office and warehouse building which faced Spring Street (background). Large doors in the rear of this building (visible at left, through the platform) accommodated freight cars for indoor loading and unloading (the same plan was, at one time, also used at Greenville). Photo courtesy of Thomas Fetters.



Figure 5.116: View from Spring Street. The truck loaded down with cotton bales is backed over the platform track extension; the freight door to the right serves the P&N express office. Photo courtesy Thomas Fetters.



Figure 5.117: October 20, 2005. Today, the area once occupied by the passenger platform and yard tracks is a parking deck driveway. The two-story portion of the station was where QS-1 now stands (left).

Figure 5.118 (following page): Track chart of the Spartanburg yard and terminal, c. 1931. As at Greenville, several of the yard tracks extend into the basement levels of buildings on Spring Street for loading and unloading indoors. University of North Carolina at Charlotte, Manuscript Collection Sixteen.





Figure 5.119: October 20, 2005. The small wood-frame station at Taylors, South Carolina. Photo courtesy of Thomas Fetters.



Figure 5.120: The Taylors electrical substation. The P&N used roughly a dozen such substations to feed its overhead catenary wires. Photo courtesy of Thomas Fetters.



Figure 5.121: October 20, 2005. The site of the Taylors Station. Station probably stood where the vehicle is parked; an "H" shaped electrical pole barely visible indicates that the substation probably stood adjacent to the track and against the treeline in the background.



Figure 5.122: View of Taylors from the opposite direction. Photo was taken shortly before the overhead catenary wire was dismantled in the early 1950s.



Figure 5.123: The Thrift station, January 30, 1941.



Figure 5.124: October 18, 2005. The Thrift, North Carolina, station in its native habitat.



Figure 5.125: October 18, 2005. Thrift lurks behind the mimosa bushes along Old Mount Holly Road in the Paw Creek community.



Figure 5.126: October 18, 2005. Unfortunately, this is as much as can be seen of the Thrift station.



Figure 5.127: As yet, the only photo found of the Tucapau station. Like Piedmont, it has two freight doors (instead of the more common single platform door). The distinguished Westinghouse semaphore is set to "STOP." Although this photo is the only evidence, it appears that the building was located at the diamond where the Southern Railway crossed the P&N. Both roads used a short branch that ran down into the Startex Mill. Photo appeared in the January, 1948, issue of *Semaphore*.



Figure 5.128: The White Horse flag stop as it appeared in the mid-1940s. Photo courtesy of Thomas Fetters.



Figure 5.129: October 20, 2005. White Horse today.



Figure 5.130: This *may* be the P&N station at Williamston (now lost), but it is probably the Southern Ry. station instead.



Figure 5.131: Williamston agent John Barr points to a joint in the rail in the September, 1956, issue of *Semaphore*. Behind the switchstand over his left shoulder are two buildings which appear to be an electrical substation and the Williamston depot. Unlike the previous photo (Figure 5.130), the building in this image appears to be one of C.C. Hook's single-story plans.

Key to Mapped Railroad Lines

Piedmont & Northern Ry.
Southern Railway
Seaboard Air Line Railroad
Atlantic Coast Line Railroad
Clinchfield Railroad
Greenville & Northern R.R.
Ware Shoals Railroad














































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