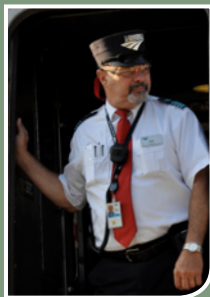


The **Future** *is Arriving*

by Walter R. Turner

North Carolina's leadership in
reviving passenger rail and creating
urban transportation centers



July 2012

This paper tells the story of how North Carolina created a passenger rail program that is ranked among the best four in the nation.¹

Beginning in the 1980s, bi-partisan support from governors and legislatures supported passenger rail. Support from the Highway Trust Fund helped finance restoration of daily *Carolinian* train service between Charlotte, Raleigh, and New York City in 1990. The same year, the North Carolina Department of Transportation (NCDOT) organized the NC Volunteer Train Host Association, an organization of volunteers who began riding the *Carolinian* as goodwill ambassadors.



Volunteer Train Hosts 2008 Annual Meeting at the Kannapolis Station

Passengers await the *Piedmont* in Durham



Five years later, NCDOT collaborated with Amtrak to start the *Piedmont* train that left Raleigh and traveled roundtrip to Charlotte, a complement to the *Carolinian*. This step required a maintenance facility in Raleigh to service state-owned locomotives and rail cars. Recently, the state utilized federal funds to add another *Piedmont* roundtrip to better serve passengers.

And what about stations that passengers needed? Beginning in the 1990s, the NCDOT accessed transportation enhancement funds to renovate older rail stations and advocate that local and intercity bus service

be located in the same general location to form urban transportation centers (also called multimodal stations or MMSs). In 1998, a restored rail station and new bus station opened in Wilson, followed by centers in Rocky Mount, High Point, and Greensboro. In the meantime, other rail stations were renovated or constructed across the state.

Concurrently, the state was upgrading the Raleigh-Charlotte corridor as part of a plan to streamline passenger travel to Washington, DC. This effort has included constructing track improvements, eliminating unsafe rail crossings, and creating more stations. A modern station in Kannapolis serves as a

model for future ones in Lexington and Hillsborough. Durham's new station was constructed from a tobacco warehouse, with a new bus station across the street. Both Raleigh and Charlotte have ambitious, public-private plans for new urban transportation centers. In addition, the state has plans to expand passenger

rail to Asheville and Wilmington.

The attractive stations and growing number of passengers stimulates downtowns and strengthens

the state's economy. For example, the Rocky Mount station includes offices for the city's chamber of commerce and a park with sculptures. Durham's new MMS blends with the city's mix of offices and entertainment on the former tobacco company campus. Greensboro features a thriving transportation center downtown in a restored Beaux Arts railroad station with a landscaped parking lot.

This story is written from a perspective that blends the past, present, and future — and includes the key leaders providing the vision and leadership. But first, understanding this development requires a look back at mass transit milestones:

- ▶ Electric streetcar era (1890s-1930s), passengers transported from railroad stations to downtowns, neighborhoods, and entertainment/recreation parks.²
- ▶ During 1920s-World War II era, increased intercity travel turned railroad stations and bus stations into major transportation centers, though they were usually separated by several blocks in downtown areas.³
- ▶ Decline of passenger rail after World War II was followed a few years later by intercity and intracity bus operations.
- ▶ Automobiles, highways, and aviation services escalated after the war.
- ▶ In 1970, Congress passed Rail Passenger Service Act, creating the National Railroad Passenger Corporation (Amtrak) to save passenger rail travel.
- ▶ During the 1980s and 1990s, NCDOT developed strong rail and public transportation programs. They provided consultation and funding to help local communities transition from private to public city bus systems, establish rural van and bus programs, and revive passenger and freight rail service.
- ▶ Large cities offered examples of how major multimodal stations worked. MMSs were created at large railroad stations, including: Philadelphia's 30th Street, Boston's South Station, Chicago's Union Station, and stations in Baltimore and Newark.
- ▶ Union Station in Washington, D.C. opened in 1988 with Amtrak, Metrorail, and a parking deck. To help attract passengers, upscale shops, restaurants, and a movie theater were included.
- ▶ 1989-- Governor's Rail Passenger Task Force report
- ▶ 1997—Transit 2001 report

More than 85 percent of North Carolina's railroad stations have been demolished since World War II due to the decline of passenger rail traffic. Fortunately, significant stations survived, although they typically have been in deteriorating condition. NCDOT was able to acquire transportation enhancement funds for restoring historic train stations as a result of the Intermodal Surface Transportation Efficiency Act (ISTEA) legislation during 1991–1998 and subsequent transportation legislation.⁴ Plans included restoring the buildings to their original appearance, complying with Americans for Disability (ADA) regulations, and adding works of art. NCDOT's Rail and Public Transportation divisions recognized that enhancement funds provided an opportunity to use restored railroad stations in selected cities for both train and bus passengers.

Multimodal stations allowed passengers to change from one transportation mode to another, "overcoming

the impression that downtown was dead and acting as sparkplugs to attract new business," according to NCDOT's Allan Paul, director of the Operations and Facilities Branch of the Rail Division.⁵ Publication of *The Transit 2001 Executive Summary and Technical Report* in 1997, advocating more transit services; the U.S. Department of Transportation's 1998 designation of the Washington, D.C.- Charlotte corridor for high-speed rail; and the formation of urban regional transportation organizations planning new approaches to address traffic congestion strengthened support for multimodal stations.⁶

The *Piedmont* departs Capital Yard enroute to Charlotte



Durham

In 2009, a fully operational railroad station opened in Durham for a bargain price. The Durham Station opened in one-third of an 1897 warehouse, one of many buildings on the former campus of the Liggett & Myers tobacco company. The station includes a large open room with traditional railroad-style seating, a ticket office, restrooms, and a large wall collage of historic photographs portraying scenes from the city's history. Heat and air ducts line the ceiling. A walkway leads to a platform covered with a canopy.



The Durham Train Station opened in 2009 for only \$2.4 million.



Creating the station cost only \$2.4 million, \$1.25 million from the Federal Highway Administration matched with state funds. NCDOT, with financial assistance from the city, leases the space from Walker CST, LLC, a development firm led by former Duke University basketball players that renovated tobacco buildings north of the track for residential, entertainment, and office use. Due to a significant increase in ridership since the facility's opening, the station's parking lot's size will double in 2012.

From the station, one can see the six-acre modernistic bus station across the street that opened in 2010 under the guidance of Mark Ahrendsen, Durham DOT Director.



Durham Bus Station

In 1996, Durham citizens approved \$5 million in bonds, which eventually was matched with about \$4.5 million from NCDOT and \$8 million from the Federal Transit Administration to fund the land purchase and construction. The two-story building includes glass walls. Activity is centered on the first floor seating area with supporting facilities including a large screen television.

The Greyhound ticket office leads to four bus bays outside. Just beyond are two rows of 16 bus bays covered by canopies for local bus operations. At designated times during the day, buses fill the bays, making transfers convenient. Most of the city buses are hybrid vehicles, powered by diesel electric engines. The station is open daily from 6 a.m. to midnight. The second floor includes a meeting room and space for a future passenger bridge to be built across Chapel Hill Street to connect to a future station of Triangle Transit Authority (TTA) that will carry light or commuter rail.⁷

When Congress passed the six-year highway/transportation bill in 1991, it created a category of "enhancement funds" that were available for nontraditional programs related to environmental or quality-of-life issues, such as restoring train stations. So when the Rail Division began establishing MMSs, it was practical to utilize enhancement funding. It was federal funding, administered by state DOTs, requiring a 10% state match and 10% local match. Thus the Rail Division turned to cities with attractive but deteriorated stations: Greensboro, High Point, Rocky Mount, and Wilson.

Greensboro

By 2005, Greensboro could boast of having the state's crown jewel urban transportation center. It all started in 1927, when Southern Railway built an impressive Beaux Arts station in Greensboro. It was designed in Beaux Arts classical style by the architectural firm of Fellheimer and Wagner, who had earlier helped design New York City's Grand Central Station.

After rail travel declined, it gave the station to the city of Greensboro in 1980 and Amtrak

moved passenger service to a small office building in Southern Railway's Greensboro freight yard. The J. Douglas Galyon Depot was named for Galyon, a Greensboro citizen who was chairman of the NCDOT Board from 2001 to 2009.

The 56,000 square foot building is on two levels and was structurally sound, but required extensive restoration, including rebuilding the passenger tunnel and octagonal chimney. Workers constructed a new baggage tunnel, two long platforms with canopies, and a large landscaped parking lot in front. The tracks were moved further from the building to accommodate the bus station on the upper back side with 22 bus bays for city, Piedmont Authority for Regional Transportation (PART), and Greyhound buses. NCDOT also supplements the cost of operating a Greensboro-Winston-Salem-Boone shuttle route popular with college students.

As in earlier years, train passengers enter the elegant two-story concourse from the street, then take a tunnel to access the platforms and tracks above. Most of the restoration construction was completed



J. Douglas Galyon Depot in Greensboro is a model for an urban transportation center.

from 2001 to 2005, when Amtrak service moved into the Depot. The total cost of the MMS was about \$31 million. Spending \$31 million to create an urban transportation center sounds like a significant sum of money — until one realizes it is the approximate cost of building one mile of interstate highway.

While the Greyhound and local bus section is open most of the day and evening, the Amtrak section is open 24 hours daily. It has been challenging for the Depot to find tenants to rent 15,000 square feet of available space. In 2010, however, a coffee shop opened in the former Lunch Room off the concourse and close to a new high-tech visitor center.⁸

High Point

Though the attractively renovated building is not readily visible to busy passing traffic on High Point's Main Street, the unique Southern Railway station that opened in 1907 on one level is now providing passenger services that encompass two levels.



High Point Station, NCDOT station attendants and *Piedmont* and *Carolinian* Trains “meeting” at the station



Carolina Railroad Company now owns the 317-mile corridor from Morehead City to Charlotte. The Company, wholly owned by the State of

North Carolina, operates as a private corporation. It receives no state funding, but its revenues come from a trackage rights agreement with Norfolk Southern.

Though parking is available in a parking deck a block away, NCDOT is adding 27 street parking spaces nearer the station. The agency also subsidizes PART shuttle buses for transporting Winston-Salem passengers to meet all Amtrak

trains at the station. Greyhound, however, continues to operate from an aging station three blocks away.⁹

To separate train and automobile traffic, a city-state-federal funded project spent \$1.5 million in the late 1930s to build a one-mile, 35 feet deep, fully grade separated trough through the city in which the trains could travel. Passengers continued to use the Richardson Romanesque-style station, but had to descend one level by stairs to access the trains. The city built a small bus station across the tracks in 1981. Despite a restaurant moving into the train station in the 1980s, the building continued to decline and civic leaders feared it would be demolished.

The biggest hurdle in preparing for restoration was arranging for the North Carolina Railroad (NCRR), city of High Point, Norfolk Southern Railroad, Amtrak, and NCDOT to sign a five-way “license to renovate.” The total restoration cost, an enhancement project, was \$6.8 million and the MMS opened in 2003. The city of High Point owns the station, while the NCRR owns the building’s land and railroad right-of-way.

An outgrowth of the North Carolina Railroad that opened an east-west rail line in 1856, the North

Rocky Mount

The Rocky Mount rail station that was built in phases in the early twentieth century is now dressed up for early twenty-first century services. The three-story terminal includes 25,000 square feet, plus a 7,000 square foot Railway Express Agency (REA) building. In the mid-1990s, CSX Transportation (CSXT) sold the station and land to the city of Rocky Mount. The restoration process required two massive steel columns from the foundation to third floor to stabilize the station, plus reconstructing the platform and adding a new canopy. The final price tag was \$12 million, with the city contributing over \$1 million. Three smaller buildings were demolished for room to add parking and a park.

The train station opened in 2000. In addition to housing the Rocky Mount Chamber of Commerce on

the station's second floor, the city leases space to other tenants on the third floor. The city had opened a bus station in the former REA building in 1997, serving city, regional, and Trailways (now Greyhound) buses. However, since that time, the number of daily intercity buses has dropped from 16 to four, part of a national decline in bus travel. The bus facilities are open most of the day and evening, while Amtrak services are

available 24 hours daily. In 2010, NCDOT and City of Rocky Mount shared the \$500,000 cost of MMS maintenance that consisted of exterior brick work, interior painting, and roof repairs.¹⁰



The Rocky Mount station includes a two-story atrium with a porte cochere that faces a new city park.

Wilson

Wilson possessed the first urban transportation center in North Carolina. The Atlantic Coast Line Railroad built a small but modified Mission style station and REA building at Wilson in 1924. A new bus station opened across the street in 1988 at a cost of \$1 million, funded by the Federal Transit Administration with state and generous city of Wilson matches.¹¹ In 1994, CSXT sold the railroad station and REA building to the city for \$1 but retained ownership of the land.

NCDOT supplements the cost of Greyhound's Raleigh-Norfolk route that stops in Wilson and Rocky Mount. The initial two phases of the rail station renovation cost \$2.5 million. When the rail station renovation was completed in 1998, complemented by the conveniently-located bus station nearby, the location offered multimodal transportation services. Future plans are to restore the train station canopy, which will cost \$475,000.¹²



Miss Rail Rose, a mosaic sculpture, stands watch at the Wilson Train Station.



Charlotte



Gateway Station will accommodate Charlotte's dynamic growth

inactive line (that CATS that will eventually use for commuter service to the Lake Norman area) at grade

Charlotte has an ambitious plan for Gateway Station, a modernistic urban transportation center. Allan Paul took the responsibility of orchestrating the planning and development of the Charlotte MMS, working closely with Charlotte Area Transit Authority (CATS), the city, and Norfolk Southern. The chosen site is the same block where the handsome Southern Railway Station was located during 1905-1962—five blocks west of the Square on West Trade Street next to the Norfolk Southern tracks. The only building remaining on the block is the Greyhound Bus station on a two-acre site.

NCDOT and CATS signed a memorandum of understanding in 2004 to create the MMS. The plan is a public-private blueprint that will be the centerpiece for a transformation of the western side of Charlotte's uptown.¹³ A large modernistic station, Gateway Station, will include facilities for Amtrak and CATS operations, along with a civic plaza at street level. The bus facilities for city, regional, and Greyhound buses will be located on the main block and an adjoining block. Streetcars will run down Trade Street to easily connect passengers to the current East Trade Transit Center and CATS's north-south light rail Blue Line.

Funding will play a major role in facilitating the MMS plan. Currently, CSXT's east-west single track, carrying sixteen daily freight trains, crosses Norfolk Southern's north-south, double-track mainline, carrying thirty-two daily freight trains and Norfolk Southern's

level a half mile north of future Gateway Station. It would not be efficient for passenger trains to use such a busy intersection with freight trains. A federally funded plan costing \$129 million will separate the NS and CSXT tracks during 2013-2017, when the railroads will utilize temporary bypass tracks. The ADM Milling Company, the largest flour mill in the Southeast US, includes numerous tall cement silos on both sides of the Norfolk Southern tracks just south of the intersection.

The total cost of constructing the Charlotte MMS is estimated at \$211 million. This includes \$129 million for the track separation and \$82 million for Gateway Station. Included in those costs will be the demolition of the Greyhound station and construction of bridges, tracks, and platforms to serve the new MMS. Fortunately, NCDOT has purchased thirty-six acres of land extending along the tracks for nearly a mile. Since only fourteen to seventeen acres will be needed for the MMS and associated tracks and platforms, the state has the potential to lease air rights to developers for new buildings in order to provide funds to operate and maintain the MMS.¹⁴

Jack Claiborne, former associate editor of the Charlotte Observer, says that plans for the urban transportation center are "another example of a forward-thinking, public-private venture to create brighter opportunities and a higher quality of life for the Charlotte region."¹⁵

Raleigh

Creating an MMS plan for Raleigh is a complex challenge. Although the NCDOT Rail Division has been the lead planner and coordinator for all other MMSs in the state, the city of Raleigh took that role for its multimodal station.

When Mitchell Silver became the city's planning director in 2005, with experience in Northeast urban areas, the city asked him to oversee the planning and development of Raleigh's station. After working with numerous organizations affected by a plan, the city and its consultants, HDR, proposed a comprehensive a MMS plan called "Union Station" in 2010.

The plan recommended that Union Station be constructed in the vicinity of the "Boylan Wye," where the Raleigh & Gaston railroad and the North Carolina Railroad intersected by the late 1850s. Located about a mile west of downtown, the wye forms a triangle where north-south and east-west tracks intersect. Today, this includes freight trains on Norfolk Southern and CSXT tracks as well as Amtrak trains that operate on the North Carolina Railroad. The plan would place the MMS station on the downtown side of the wye. The warehouse district is located between the wye and downtown and contains occupied and unoccupied warehouses, offices, restaurants, clubs, and studios for artists and designers.

To avoid expensive new construction, the city of Raleigh and NCDOT have agreed to create the MMO around the massive Dillon Supply building (also called the Viaduct building because of a former viaduct in the area). The plan involves renovating the building, making track, platform, and track improvements, and upgrading the primary access street. The total cost is estimated to be \$75 million. Thus far, the city has earmarked \$7M for the project and secured a \$21M



Exciting plans are underway for Raleigh's urban transportation center

federal grant for track improvements. The building will replace the current cramped Amtrak depot. While the city would retain the Moore Square Transit Station for local buses, located in the eastern section of downtown, the MMS will also include Greyhound, city, and TTA buses.¹⁶

NCDOT endorsed a stipulation that a future Raleigh-Richmond high-speed line will include no at-grade railway crossings. Much discussion has focused on whether the northward high-speed route leaving the MMS should travel over Norfolk Southern, CSXT, or a compromise rail corridor. NCDOT will make a decision on the route by early 2012.

TTA has finalized an ambitious transit plan for the Triangle that includes commuter rail as well as a light rail line route connecting Cary with the Union Station MMS and Triangle Town Centre located northeast of Raleigh at I-540. In November 2011, the voters of Durham County approved increasing the sales tax by a half cent to support transit funding. Wake County will probably schedule a similar vote in 2012. If approved, the additional funds will finance transit projects, including the light rail line.¹⁷

As a *News & Observer* editorial stated, "...Mitchell Silver and his department have done admirable work in awakening Raleigh to the range of transportation possibilities it is lucky enough to enjoy, using a canvas that for years has been neglected but now could be used to produce a masterpiece."¹⁸

Cary



Cary Amtrak Station expansion is leading to strong passenger growth

Fulfilling a long-range vision, an expanded train station with growing bus services opened in Cary in 2011. Cary is a fast-growing, upper middle class, suburban town for persons who work in Raleigh or the Research Triangle Park. In 1996, the Town of Cary, NCDOT, and TTA collaborated on a futuristic plan. They agreed to build a handsome brick structure and lease most of it to the Division of Motor Vehicles, but include an Amtrak waiting room and continue stops from the Raleigh-Charlotte passenger trains on the station's north side. The cost was \$729,000, which involved \$629,000 from the town and \$100,000 from TTA, which bought land nearby for its regional buses. Since 2007, Amtrak's New York-Florida Silver Star has made scheduled stops on the station's south side CSXT tracks. DMV recently relocated.

When the larger station opened, its size had doubled to 6,200 square feet to provide a full service depot with Amtrak agents and check baggage service. The transition also turned over the former waiting room to TTA and city bus passengers, and extended the north platform. The expansion cost \$1.7 million, the first station project in the state funded by the American Recovery and Reinvestment Act (ARRA).¹⁹

Winston-Salem

Largely for geographical reasons, Winston-Salem has never enjoyed a strong railroad presence and its current outlook to establish an MMS is uncertain.

The area was not included on the North Carolina Railroad built in the 1850s. In the mid-1920s, however, railroads serving the city collaborated to build a three-story, 36,000 square foot, Beaux Arts, Union Station. After passenger rail service was discontinued to the city in the 1970s, Harvey Davis purchased the station, where he has operated an automobile garage on the street-level top floor. During the past decade, the city of Winston-Salem, NCDOT, and PART have negotiated with Davis about selling the station to create an MMS. In the meantime, Davis began working with a private developer on a project that would include a new retail/office/residential/parking deck building and collaboration with nearby Winston-Salem State University, but that plan did not work out. Talks between the city and Davis did not lead to an agreement.

The City of Winston-Salem in early 2011 acquired the station and property via "deed or condemnation" or "eminent domain," paying \$650,000 from an FTA grant. Davis is seeking legal means for a higher price, while looking for an alternate garage site. The city's plan is to find federal funds to renovate the building and establish a MMS centered on the station's top floor and include local and PART bus service at street level, while renting the station's lower levels.



The NC Amtrak Connector shuttle service links downtown Winston-Salem to Amtrak service in High Point.

Although a Greensboro-Winston-Salem-Lexington “elbow” was added to the Washington-Charlotte high-speed route in 2001, mainly for political reasons, North Carolina’s current high-speed funds are focusing on the main Charlotte-Raleigh corridor that does not include Winston-Salem. PART is studying the possibility of creating a Greensboro-Winston-Salem light rail or commuter line. NCDOT has a plan to create passenger rail service to Asheville, but such service would connect from Salisbury, not Winston-Salem. The city opened the Winston-Salem Transportation Center in downtown in 1997 for city, PART, and Greyhound buses, located a mile from the potential MMS site, but it has no room for expansion.²⁰

Goldsboro

The elegant Goldsboro Union Station has the potential to become an MMS, though it would be an expensive undertaking.

Opened in 1909 to serve the Atlantic Coast Line, Southern, and Norfolk & Southern railroads, it is an “eclectic, two-story, red brick structure, seven bays wide with flanking wings, features curvilinear gables on three sides.”²¹ Like many other stations, it deteriorated when the trains no longer stopped. NCDOT rescued the station by buying it in 2007 for \$330,000, made basic building repairs, arranged an enhancement grant for station design, and transferred the station to the city of Goldsboro for \$33,000 in 2009.

The city of 38,000 has torn down inappropriate surrounding buildings and held a public information meeting for residents. The building of more than 12,000 square feet sits on a six-acre site and adjoins CSXT tracks near downtown. Current plans are to establish a MMS by restoring the building for an estimated cost of \$14 million; the city of Goldsboro and Wayne Transportation Authority have planned a new bus station on the north end of the site that would cost \$4.5 million.

NCDOT’s Rail Division is seeking federal grant funds for the required environmental planning



Goldsboro Union Station was stabilized for future use.

documents for the Raleigh-Goldsboro-Wilmington and Raleigh-Fayetteville-Wilmington routes, then will decide whether to recommend building one or both routes.²²

The North Carolina Railroad sponsored studies in 2008 and 2010 to evaluate the potential for commuter passenger rail between Greensboro and Goldsboro. The 2010 study concluded that such service could attract passengers east of Raleigh as far as the Wilson’s Mills area, five miles north of Smithfield, and about halfway on the Raleigh-Goldsboro NCRR rail line.²³ No similar studies have been undertaken to assess the potential for commuter rail on a Raleigh-Fayetteville route, which is not an NCRR route.

Fayetteville

Since 1908, Fayetteville passengers have enjoyed north-south, East Coast service on Atlantic Coast Line Railroad and since 1971, on Amtrak, from a Dutch Colonial Revival–style, downtown station. Amtrak initially restored the station in 1980 and NCDOT has funded two subsequent restorations with enhancement funds. The *Palmetto* and *Silver Meteor* trains currently serve the city on a New York City to Miami route.

The city and NCDOT have completed an environmental assessment and finalized plans to build a bus station two blocks south of the train station, thus creating a two-building multimodal station. During 2012, the city will remove structures on the site and work on the station design. A \$1.3 million



Built in 1911, the Fayetteville Train Station serves four trains daily.

grant from the Federal Transit Agency is funding acquisition of two and one-half acres, most of which has been purchased.

Construction of the bus station is estimated to cost \$12 million to \$15 million. Greyhound, located a mile away, will remain at its present location. The new bus station will have 18 bus bays, enough for growth of city buses and possibly accommodating Greyhound in the future. With Fort Bragg's continued expansion in adding headquarters for the U.S. Army Forces Command and the U.S. Reserve Command in 2011, the population of greater Fayetteville approaches 300,000.²⁴

Wilmington

NCDOT and the city of Wilmington are developing a MMS on the northern edge of downtown near the beginning of the historic Wilmington & Weldon rail corridor that opened in 1840. Though the Atlantic Coast Line Railroad was headquartered in Wilmington from the early twentieth century until 1960, the city's rail service was discontinued later that decade. NCDOT purchased a seven-acre site for the MMS for \$9.3 million, with the city of Wilmington contributing \$930,000. By 2012, an environmental analysis and purchase of additional land will be completed. The plan is to build a bus station (Phase 1) costing \$7 million to \$10 million. When passenger rail reaches Wilmington, a rail station (Phase 2) will be added at the site.²⁵

Moderate-sized stations

NCDOT and the city of Kannapolis collaborated to create the Kannapolis Train Station that is a prototype for future stations in mid-sized communities. The station opened in 2005 at a cost of only \$3.4 million with NCDOT funds and a 10% local match.²⁶ This attractive brick structure is located in downtown Kannapolis a few blocks from the growing North Carolina Research Campus.²⁷

In addition to the usual facilities and local historic photographs, the station is the only operating one in the state that includes a large meeting room where the city council holds meetings. It also can function as an additional waiting area when needed. A wall-hanging quilt showing photographs and captions of local churches and the sculptured bust of a local politician are also included.

Like other smaller stations that do not have Amtrak personnel, it is manned by NCDOT station attendants who are available when the station is open to accommodate train arrivals. Such stations are typically open an hour before train arrivals and closed a half hour after departure. Passengers can buy tickets by (1) using a credit card at a station kiosk or (2) using a red phone for reservations and arranging to pay on the train. Both Concord Kannapolis Area Transit and Rowan Transit System buses stop at the station. A new city bus station opened in Concord in 2009. The area's Greyhound station is located near the intersection of US 29 and I-85, four miles from the train station.



Kannapolis Train Station is a model for other mid-sized stations.

The Kannapolis Station is a model for similar stations planned for Lexington (estimated cost of \$15.5 million includes track work) and Hillsborough (estimated cost of \$11.5 million includes track work).²⁸

In 1908, Frank Milburn, Southern Railway's architect, designed the Salisbury Passenger Depot in a Spanish Mission style that "combines symmetry with romantic curvilinear gables, colorful tile roof, arched openings, and a commanding central tower."²⁹ The Historic Salisbury Foundation bought the station in 1984 and restored it by raising \$3 million and utilizing \$1 million of enhancement funds. Since the Foundation and city hold public events in the original waiting



Salisbury's spectacular Spanish Mission station

room, Amtrak operates from a small modern annex. In 2009, NCDOT built a 600-foot platform and canopy, costing \$1 million. Due to increased ridership, NCDOT is currently working on drawings and specifications to double the size of the passenger waiting room. Local buses from different routes meet in a parking lot one block away, while Greyhound buses stop at a carryout store three miles away.³⁰

The North Carolina Railroad renovated a historic NCRR Company Shops building for \$3 million that opened in 2003 as Burlington's train station. It features an elaborate exhibit of North Carolina Railroad history that includes replica portions of a NCRR steam locomotive and Norfolk Southern diesel. The city of Burlington uses the second floor as office space for the police department. NCDOT station attendants furnish passenger services for five North Carolina



The Burlington Train Station is located within the NCRR Company Shops complex.

stations that do not have Amtrak personnel: Kannapolis, Salisbury, High Point, Burlington, and Selma.³¹

NCDOT's shop facilities

The Rail Division funds and supports the four daily *Piedmont* passenger trains, two in each direction, that operate on the Raleigh-Charlotte corridor. It owns the rail cars and locomotives used for *Piedmont* service, and operates Capital Yard, a repair and maintenance facility that opened in Raleigh in 1995. The current locomotives include the *City of Salisbury* and *City of Asheville*. The *City of Greensboro*, *City of High Point*, *City of Durham*, and *City of Burlington* were refurbished for about \$1.3 million each, one third of the cost of a new locomotive. In addition, NCDOT owns twelve coaches, one combination car, a one-

Raleigh Rail Maintenance Facility



third baggage/two-thirds coach seating car, and five baggage/lounge/vending machine cars. Most car and locomotive repairs are performed at the Capital Yard shop by a contractor, Herzog Transit. Heavy railcar and locomotive repairs and refurbishments are contracted out via competitive bidding. The federal stimulus program, ARRA, is funding several railcar and locomotive upgrades and refurbishments.³²

Funding stations and rail improvements

In 1989, the administration of Governor James G. Martin and the legislature created the Highway Trust Fund, primarily to finance highway construction. It also earmarked \$5 million annually for economical alternatives to highway construction. “That was invaluable, the first real funding for rail improvements,” says David King, former deputy secretary for transit at NCDOT.³³ Later, \$5 million was designated to both the Rail and Public Transportation divisions.

As stated earlier, the Federal Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), a comprehensive six-year highway/transportation bill, was a breakthrough for both rail and public transit funding. It created three new programs, each requiring a 10% state match and 10% local match.

First, the enhancement program, administered by the Federal Highway Administration (FHWA), can be used for “rail corridor preservation, historic preservation, bicycle and pedestrian facilities, scenic and landscaping.”³⁴

Second, the Congestion Mitigation and Air Quality (CMAQ) program has provided consistent funding for the Rail Division to the present time. The FHWA and the Federal Transit Administration (FTA) jointly administer the program. The purpose is to fund “surface transportation and other related projects that contribute to air quality improvements and reduce congestion.”³⁵

Third, ISTEA created a discretionary fund, administered by the FTA, which the Public Transportation Division has used to strengthen bus and transit programs. Since the 1980s, FTA has offered formula funds, based on population density and amount of service, for renovating or building bus stations. The creation of the enhancement, CMAQ, and discretionary programs in 1991 was a signal that Congress wanted to strengthen the nation’s non-highway programs and encourage services that offered alternatives to the automobile.

Enhancement funds were the major source of Rail Division funding for renovating railroad stations from 1992 to 2007. It was the major funding source for creating the urban transportation centers in Greensboro, High Point, Rocky Mount, and Wilson. In addition, it has funded station renovations at Hamlet, Southern



Morganton Depot and Amtrak stations at Southern Pines and Hamlet





Track and signal improvements are critical to future progress

Pines, Fayetteville, Selma, and Salisbury, as well as Morganton, Marion, and Old Fort on the Salisbury-Asheville route.

CMAQ has also been a consistent funding source for track construction, station improvements, and train operations. It helped fund significant track and signal improvements during 2002-2009 on the Raleigh-Charlotte corridor, starting east of Greensboro and west of Raleigh. The most dramatic change was double tracking between Greensboro and High Point. Together, these projects saved more than half an hour for passenger trains on the corridor.³⁶ CMAQ also furnished \$3 million for NCDOT to add a new, midday *Piedmont* train in the summer of 2010 on the Raleigh-Charlotte route, which has increased passenger levels on that corridor by thirty percent. The amount of funding from the Highway Fund for the Rail Division has increased over the years. The NC Moving Ahead program, established in the early 1990s with unspent highway bond funds, also helped. FTA's discretionary funds have funded construction of several new, local bus stations in recent years, many of which

complemented passenger rail service at MMSs.³⁷

Congress established the Passenger Rail Investment and Improvement Act (PRIIA) in 2008 to improve service, operations, and facilities for "intercity passenger rail, including Amtrak's long-distance routes and the Northeast Corridor (NEC), state-sponsored corridors throughout the nation, and the development of high-speed corridors."³⁸ PRIIA approved an NCDOT request for \$22 million in the fall of 2010, and the Rail Division is determining projects it will fund.

In 2009, Congress established the American Recovery & Reinvestment Act (ARRA), better known as the stimulus package, to help the nation recover from the recession. In early 2010, President Barack Obama announced that \$8 billion of the ARRA funds would be available for high-speed rail programs in the nation.

Of this amount, \$545 million was earmarked for North Carolina. The grant consists of \$520 million to strengthen the Raleigh-Charlotte corridor, such as double-tracking 26 miles between Charlotte and Greensboro and strengthening MMSs, and \$25 million for improvements to CSXT and Norfolk Southern lines.³⁹ To accept the funding, NCDOT is negotiating agreements with CSXT and Norfolk Southern, which are concerned about how enhanced passenger service may affect freight service.



NCRR Bridge over NC 54

NCRR Pedestrian Underpass at Elon University



North Carolina Railroad Company

In addition, some members of the General Assembly raised concerns about the state accepting ARRA funds for rail improvements. When mayors and contracting companies appealed to the legislative committees to permit the grant, NCDOT was allowed to accept the grant funds. However, the legislature also passed legislation that allows the General Assembly to approve any future federal rail grants of over \$5,000. All stimulus projects must be completed by September 30, 2017.⁴⁰

Since 2000, the North Carolina Railroad Company has invested over \$160 million for track and bridge improvements. NCRB rebuilt a railroad bridge over NC 54 in the Research Triangle Park and has collaborated on several track improvements with NCDOT. In addition, it partnered with Elon University in 2010 to build a \$2.5 million, state-of-the-art pedestrian underpass and plans a similar partnership with UNC-Greensboro.⁴¹

Key NCDOT Staff

For decades before he left NCDOT in 2006, Deputy Secretary for Transit David King was a strong administrative force for non-highway programs, both within NCDOT and with the legislature.⁴² He was the second chair of the States for Passenger Rail Coalition, an effective national advocacy organization. During the past two decades, Allan Paul has taken leadership of reviving passenger rail.⁴³ He is knowledgeable of rail history, passenger equipment, railroad operation, and capital needs of rail programs. Working with local officials across the state, he is the lead planner and negotiator in establishing multimodal stations, from planning to implementation stages.

Patrick B. Simmons directed the Rail Division from 1994 to 2012.⁴⁴ He is an expert on state and federal budgets, a key reason that Rail Division funding has steadily grown. He has testified before Congressional committees on transportation legislature, including the American Recovery and Reinvestment Act. “Pat and Allan have a great deal of perseverance built into their character,” says King. Anthony Fuller, who has

North Carolina ties, is the new Rail Division director. He has worked in both public and private rail sectors across the country, most recently overseeing rail operations for Amtrak in Los Angeles.

Craig Newton, who holds a civil engineering degree, has worked closely with Paul as the project manager for every rail station improvement since 2000, except the Salisbury Station renovation.⁴⁵ Paul Worley, who is in charge of safety and engineering for rail programs, implements track improvements that include double tracking, making rail crossings safer, and eliminating unnecessary crossings.

Both Sanford Cross (1993-2002) and Miriam Perry (2002-2012) directed the agency’s Public Transportation Division and oversaw an expansion of local and regional bus services and construction of several local bus stations. Teresa Hart became the Division’s director in 2012. Paul Morris, after working in community planning, urban design, and economic development in several states and countries, was appointed Deputy Secretary for Transit in 2011.⁴⁶



Pat Simmons at Southern Pines Station Opening



Allan Paul, left and Craig Newton on construction site at Greensboro Depot

Ken Taylor Photo

Conclusion

The year of 2012 may be a turning point for the development of passenger rail progress. It is difficult to predict the influence of the recent elections and the obvious budget problems of the state and federal governments. Because of the recent turmoil in the Middle East and North Africa and other economic conditions, gas prices in North Carolina increased to \$4 a gallon. At the same time, the state's population has grown by 18.5 percent in the last decade—from about eight million in 2000 to nine and a half million in 2010, making North Carolina the nation's tenth most populous state.⁴⁷ These developments illustrate the importance of creating a stronger passenger rail program.

Looking at the Raleigh-Charlotte corridor offers a good model for future progress. When the *Carolinian* began demonstration service in 1984, the trip took four hours and ten minutes. Today the *Piedmont* can make the trip in three hours and twelve minutes. With double-tracking, elimination of grade crossings, more modern stations and service growth, the running time on the corridor will become faster and ridership will continue to increase. At the same time, NCDOT is focusing on the entire state, which includes planning

and growth for not only the present sixteen Amtrak stops, but also expanding passenger rail service to Asheville and Wilmington.

Bob Johnston, a *Trains Magazine* columnist, concludes, “North Carolina is firmly in the number three position among Amtrak’s state partners when you combine the length of the state’s involvement with intercity passenger rail, the willingness to invest in equipment, its cross-promotional efforts to improve ridership plus the ground-breaking car and station host programs, and continued emphasis on growth for future services.”⁴⁸

The future is indeed arriving.



Passengers board the *Piedmont* in Durham

Notes

- 1 Larry Vanover, Assistant Superintendent of Operations, Amtrak, interview with author, North Carolina Transportation Museum train excursion, October 30, 2011; Bob Johnston, columnist for *Trains Magazine*, e-mail to author, November 2, 2011.
- 2 Walter R. Turner, "Development of Streetcar Systems in North Carolina," North Carolina Transportation Museum, 6-19.
- 3 An exception was in Charlotte, where the intercity bus station and Southern Railway Station were across Trade Street from each other from the 1925 to 1962.
- 4 Walter R. Turner, *Paving Tobacco Road: A Century of Progress by the North Carolina Department of Transportation* (Raleigh: North Carolina Department of Cultural Resources, 2003), 132. Subsequent six-year transportation bills included the Transportation Equity Act for the 21st Century (TEA-21) during 1998-2005, and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) from 2005 to the present.
- 5 Allan Paul, interview with author, Raleigh, January 12, 2007.
- 6 The Triangle Transit Authority (TTA) in Wake, Durham, and Orange counties was organized in 1989. Piedmont Authority for Regional Transportation (PART) in the Triad was organized in 1998, and Charlotte Area Transit System (CATS) in Mecklenburg County, in 1999.
- 7 Paul, interview with author, Raleigh, August 23, 2010; Mark Ahrendsen, interview and tour with author, Durham, September 17, 2010; Craig M. Newton, e-mail to author, November 15, 2010; Scott Saylor and Catherine Campbell, North Carolina Railroad, interview with author, Raleigh, September 28, 2010.
- 8 Walter R. Turner, "North Carolina's Multimodal Station," North Carolina Transportation Museum, 2007, 9-13.
- 9 Turner, "North Carolina's Multimodal Stations," 7-9; Brent McKinney, interview with author, Greensboro, August 4, 2010; Paul interview, August 23, 2010.
- 10 Turner, "North Carolina's Multimodal Stations," 2007, 5-7; Peter Varney, e-mail to author, September 3, 2010 and telephone conversation with author, January 4, 2011; Craig Newton, e-mail to author, September 15, 2010
- 11 This was a Section 18 grant, funded by federal, \$520,000; state, \$65,000; and city \$335,474. Gronna Jones, transportation manager, city of Wilson, e-mail to author, January 4, 2011.
- 12 Turner, "North Carolina's Multimodal Stations," 3-5; Newton, telephone conversation with author, September 16, 2010; Deborah Boyette, e-mail to author, November 12, 2010.
- 13 During recent decades, Charlotte's central business district is known as "uptown" instead of the more traditional designation, "downtown."
- 14 Turner, "North Carolina's Multimodal Stations," 15-17; Paul, August 23, 2010 interview; Paul, telephone conversation with author, December 9, 2010; Brian Nadolny, telephone conversation with author, September 22, 2010; Nadolny, interview and tour with author, Charlotte, November 11, 2010; "FY10 Service Development Program," Corridor Service Overview, 4; Executive Summary, 6-10, in possession of Nadolny.
- 15 Jack Claiborne, e-mail to author, February 8, 2011.
- 16 Matt Garfield, "Raleigh to set aside \$7 million for rail hub," *News & Observer*, May 11, 2012; Garfield, "Raleigh gets \$21 million federal grant train station plan," *News & Observer*, June 22, 2012. Paul, e-mail to author, June 28, 2012.
- 17 Paul interview, August 23, 2010; David King, interview with author, Research Triangle Park, January 22, 2010; Pat Simmons, interview with author, Raleigh, September 28, 2010; Silver, telephone conversation with author, January 14, 2011; Bruce Siceloff, "Tracks might divide Raleigh," *News & Observer*, June 4, 2010; Siceloff, "Fast train route could detour Raleigh's scene," *News & Observer*, July 11, 2010; Siceloff, "New plan has 2 light-rail lines," *News & Observer*, September 19, 2010; Juanita Shearer-Swink, planner at TTA, telephone conversation with author, November 15, 2010; Paul, e-mail to author, January 21, 2011.
- 18 "The proposed Union Station for trains and buses would send Raleigh to a new level in transportation." *News & Observer* editorial, April 27, 2010.
- 19 Newton, interview and tour with author, Cary, October 4, 2010; Bill Cole, e-mail to author, June 1, 2011.
- 20 Turner, "North Carolina Multimodal Stations," 17-19; McKinney interview; Stan Polanis, Winston-Salem DOT Director, telephone conversation with author, November 12, 2010; Robert C. Lopez, "Retraining," *News & Record*, September 28, 2008; Greg Turner, assistant city manager, city of Winston-Salem, telephone conversations with author, January 24 and November 2, 2011.
- 21 Catherine W. Bishir and Michael T. Southern, *A Guide to the Historic Architecture of Eastern North Carolina* (Chapel Hill and London, University of North Carolina Press, 1996), 379.
- 22 Newton telephone conversation; Tasha Logan, assistant city manager, city of Goldsboro, telephone conversation with author, September 22, 2010; Logan, e-mail to author, November 15, 2010; Aaron Moore, "Residents get chance to take close look at Union Station plans," *Goldsboro News Argus*, July 18, 2010; "Goldsboro Union Station and Gateway Transit Center, Project Narrative," August 10, 2010; www.census.gov; Paul, e-mail to author, January 19, 2011.
- 23 "NCRRC Commuter Rail Ridership & Market Study," 24-page summary report prepared by Steer Davies Gleave, Boston, Mass., May 2010, 16-17. This was a follow-up to "North Carolina Railroad Company Shared Corridor Commuter Rail Capacity Study," 13-page summary report prepared by HNTB, Raleigh, N.C., October 9, 2008.
- 24 Craig Hampton, Special Project Director, city of Fayetteville, telephone conversation with author, December 16, 2010; Hampton, e-mails to author, December 17, 2010 and December 9, 2011; Bishir and Southern, *A Guide to the Historic Architecture of Eastern North Carolina*, 402-403; "Amtrak System Timetable, Fall 2010/Winter 2011" (Washington, D. C.: National Railroad Passenger Corporation, 2010), 66; "Military Strategy," *Business North Carolina* 30 (December 2010), 68.
- 25 The site is located between 3rd and 4th streets and Hanover and Red Cross streets. Mike Kozlosky, city of Wilmington planner, telephone conversation with author, December 8, 2010; Mary Pope Furr, e-mail to author, December 20, 2011.
- 26 Cabarrus County, Cannon Foundation, and Atlantic American Properties also made contributions.
- 27 David H. Murdock, who is establishing the facility at the former site of Cannon Mills with collaboration from universities in North Carolina, says that "the Research Campus will be a thriving scientific community where the best minds will shape the way we understand nutrition and its relationship to disease." www.researchcampus.net
- 28 Sarah Taylor, station attendant, interview and tour with author, Kannapolis, November 23, 2010; www.bytrain.org, Rail Division, station improvement; Paul, August 23, 2010 interview.
- 29 Catherine W. Bishir and Michael T. Southern, *A Guide to the Historic Architecture of Piedmont North Carolina* (Chapel Hill and London, University of North Carolina Press, 2003), 427.
- 30 <http://www.bytrain.org/istation/isalisbury.html>.
- 31 <http://www.bytrain.org/istation/iburlington.html>.
- 32 Taft Wireback, "All aboard! Trains carry cities' names," *News & Record*, December 16, 2010; Paul, e-mail to author, February 8, 2011.
- 33 David King, telephone conversation with author, December 9, 2010.
- 34 "ISTEA," Biennial Report, 1992, North Carolina Department of Transportation.
- 35 "Congestion Mitigation and Air Quality (CMAQ) Improvement Program, 1, <http://www.fhwa.dot.gov/environment/cmaqpgs/>
- 36 James B. Harris, e-mail to Ellen Holding, April 2, 2012.
- 37 Paul telephone conversation.
- 38 "Federal Railroad Administration, Overview Highlights and Summary of the Passenger Rail Investment and Improvement Act of 2008 (PRIIA)," March 10, 2009, 1.

- 39 The \$25 million will fund the installation of four new track crossovers, three on CSXT's "A" line between Selma and the Virginia border, and one on the joint CSXT/NS line near the N. C. State Fair Grounds in Raleigh. Paul, editing mailed to author, March 14, 2011.
- 40 Siceloff, "Railway tried to get late concessions," *News & Observer*, April 3, 2011; Michael Biesecker and Siceloff, "GOP bid to turn down rail funds falls short," *News & Observer*, April 10, 2011.
- 41 Scott M. Saylor, who grew up in the Forsyth County area, graduated from UNC-Chapel Hill and earned a law degree from North Carolina Central University. He was the first staff member hired at NCR in over 100 years when appointed as staff counsel in 1989 and has served as president since 2000. Scott M. Saylor, e-mail to author, January 31, 2011.
- 42 David D. King, who grew up in Lumberton, graduated from Davidson College and earned an M.B.A. from UNC at Chapel Hill. After serving two years in the army, he joined NCDOT in 1973 and focused on responsibilities for transit and non-highway programs. He served as deputy transportation secretary from 1993 until 2006. As general manager for Triangle Transit Authority since 2007, he has overseen new plans for light and commuter rail in the Triangle area. Siceloff, *News & Observer*, "With a new chief, TTA tries again to tackle traffic," January 20, 2007.
- 43 Allan Paul, whose parents were natives of Beaufort, N.C., was reared in Greensboro and Lumberton, N.C. He graduated from Wake Forest University in 1975 with majors in history and education. As first director of the Historic Spencer Shops, now North Carolina Transportation Museum, from 1977 to 1980, he played a major role in the establishment of the historic site. His accomplishments included the initial restoration and stabilization of its large shop buildings, and the acquisition or donation of the majority of the locomotive and railcar collection. From 1981 to 1992 he worked as a private restoration consultant, primarily regarding buildings and railroad equipment. In 1992 he joined the North Carolina Department of Transportation, Public Transportation and Rail Division, to develop and manage the state's passenger rail program. In 1996 Paul became the Assistant Director (now Director) of Operations and Facilities Branch for the NCDOT Rail Division. His major responsibilities include establishment and operation of state-supported passenger rail services, restoration of historic train stations, and development of multimodal transportation stations. Turner, "North Carolina's Multimodal Stations," 3, fn. 6.
- 44 Patrick B. Simmons, a native of North Carolina, earned degrees in psychology and marine biology at the University of North Carolina at Wilmington. He joined NCDOT in 1981 to work in rural and urban programs, left the department in 1991 to organize a computer software company. He returned to NCDOT in 1994 and became director of the Rail Division. On the national level, Simmons was a member of the Surface Transportation Policy and Revenue Study Commission in 2005, and the Transportation, Treasury, Housing, and Urban Development Committee in 2009. Pat Simmons, interview with author, September 28, 2010.
- 45 Craig M. Newton grew up in Raleigh and graduated with a B.S. in civil engineering from North Carolina State University. He worked for two engineering firms in the Raleigh area. While with the Town of Cary, he was project manager in building the Cary Depot. Except for two years as partner and owner of a company involved with property investment, he has worked for the Rail Division since 2000, serving as project manager for rail station improvements, including construction of the Durham Train Station. "Craig M. Newton, PE resume," 2010, in possession of Newton.
- 46 Paul F. Morris earned a BA in landscape architecture at the University of Oregon. He spent a decade at McKeever/Morris in strategic planning and design projects in North America and Japan. Other positions include PB PlaceMaking, a planning and development service group; Parsons Brinckerhoff as executive vice president; Cherokee Investment Partners, which included green-building programs; and Greenleaf Strategies, a consulting firm. "Paul F. Morris, FASLA, Professional Biography," 2012, in possession of Morris.
- 47 Ely Portillo, "How High?" *The Charlotte Observer*, December 30, 2010; Mark Binker, "No 14th congressional district for N.C.," *News & Record*, December 22, 2010.
- 48 Johnston e-mail.

Donors

Piedmont Carolinas Chapter and Greensboro Chapter, National Railway Historical Society.

Photographs

Unless otherwise noted, photos were provided by current and former NCDOT photographers and staff: Katy Warner, Charlie Jones, Jer Warren, Billy Barrier, James B. Harris, PE, Corey Vernier and Ellen Holding.

Author

Walter R. Turner is historian at the North Carolina Transportation Museum.

Book Design

Ellen Holding retired from the NCDOT Rail Division in 2010 and is a freelance graphic designer.