

Chapter 4

On Line

C.D. Mecutchen liked the future of railroading in the nation's capital—it was the present he objected to.

“At some time,” the Treasury Department clerk wrote the District Commissioners in November 1907, Washington’s train travelers would unquestionably enjoy “one of the finest stations in the country.” Unfortunately, right now his commute from suburban Maryland ended with an obstacle course. After stepping off the B&O, he had to pick his way through the terminal’s interior, “a bewildering jungle of plasterers scaffolds and other useful but rather inconvenient tokens of its unfinished condition.” His two-block walk from the building to the trolley line was no better: flowing away from the portico was “a vast sea of mud with piles of broken bricks and rubbish of all description, with here and there a fine growth of weeds....Through this wilderness run...Delaware Ave. and

and Massachusetts Ave., each [only] somewhat improved with some sidewalk and a roadway rather better than a dirt road.”

Washington’s railroads were more concerned about a different type of problem. While they too disliked the current ugliness and disruption, they worried most what came once workers completed each piece of the project. To live up to the expectation that had been developing since 1901, what was now the largest station in the United States would have to be far better at moving people, both emotionally and literally, than its predecessors, and it would also have to be profitable. There was a great distance between open and ready, and the first true measure of the station would come in March 1909, when it hosted the kind of big event for which it had been designed—the inauguration of William Howard Taft.

I

Travelers were already benefiting from parts of the Washington improvement when Mecutchen wrote. Save for a handful of intersections in far Northeast exempted under the Union Station Act, drivers throughout the city—including a growing number using cars rather than carriages—no longer waited at nor worried about grade crossings. Conditions behind the terminal were also better, as contractors had paved the regraded streets and District laborers had reinstalled gutters and planted new trees. And though the tracks and terminal remained along Sixth Street, no longer did locomotives steam noisily across the Mall.

As 1908 began, however, most areas still looked like work zones. Since fill took two to three years to settle enough that the District would lay asphalt, rainy day drives between the Capitol and the station remained muddy slogs. Collapsing banks were forcing steam shovel

operators in Ivy City to remove additional dirt from areas they thought they had cleared. Frustrations were even higher at New York Avenue, where W.F. Strouse and the District engineers continued to argue about the bridge that would carry that street over the tracks. “I have learned that nothing can be gained by antagonism, and, therefore, have acquiesced in the methods they have insisted on employing,” Strouse reported to the PRR’s A.C. Shand, but “I have strongly as I could opposed [their] method.” His attempt to be more agreeable made little difference, with the B&O reporting six months later that work was “progressing as usual, the progress at best being unsatisfactory.”

Conditions at the station were similarly incomplete. Out back, track men were preparing the final gates while electricians installed the last signals and switches for the interlocking. In front, masons



The front of the station late in 1907 or early in 1908. (*Library of Congress*)

climbed scaffolding to place terra cotta panels into the portico's domes at the same time day laborers picked up construction debris. Inside, ironworkers assembled the fence that separated the concourse from the platforms, and attracting the most attention were the plasterers finishing the waiting room ceiling. They relied on the same massive moving scaffold—"largest in the world," a sign on its side told visitors looking on from the room's edge—that Thompson-Starrett had used to erect the roof's structural steel; it had been trimmed so its edges fit inside the barrel vault. This traveler gradually moved east to west, with the plasterers climbing it to install pre-cast ceiling panels lifted to them by hoisting engineers.

The work in the waiting room, and in the ticket lobby farther west, had forced most services into the east end of the concourse. As a bemused reporter from the *Baltimore Sun* discovered early in 1908, the scene that resulted in the concourse was not particularly dignified:

Union Station as it stands now reminds you of nothing so much as a huge church fair....The ticket office, the bureau of information and the news stands and telegraph offices are all temporary wooden quarters...The ticket office is painted an opaque light olive green. The bureau of information, which is directly opposite, is of light wood, with a *recherché* sign in gilt and black rescued from the old Pennsylvania station, adorning its front. The stopover office, next to the bureau of information, is of varnished yellow pine, natural color. And the magazine and news stand is of time-honored walnut.

Most construction had concluded by summer. The full K interlocking went into service in March, as did the remaining gates. The shovels finally left the yards in July, allowing the installation of the final tracks for storage and repair of the rolling stock. The muddy plaza

improved as well, with laborers laying wood paving blocks and erecting street lamps during the summer. By fall, even the New York Avenue bridge was finished, though not before additional conflict. District inspectors had decided that its original concrete jacketing, intended to prevent the steel deck from rusting, was of such "poor quality" that they made the B&O replace it. To ensure the second version would pass, an exasperated railroad actually gave the city the money to hire an inspector who approved the work as it proceeded.

Artisans also finished up inside the station. In the east wing, plasterers and painters decorated walls; in the west, plumbers, painters, and carpenters completed the men's lounge as iron workers and glaziers assembled the ticket windows. In the concourse, workers poured the last section of the concrete floor and installed the final pieces of the train fence; on the level below, other men created the freight entrance that allowed wagons to roll in from the street. A rotation developed on the waiting room: steamfitters first attached elbows to the heating pipes running through the floor; one set of masons then covered the pipes with concrete, after which others laid down marble squares that formed the room's walking surface. Next came carpenters, who installed the mahogany benches travelers would use, and the plumbers finished the process by connecting the elbows to radiators in the benches.

One of the last jobs, and one of the most challenging, was lighting the waiting room. Electricity had become the method of choice for illuminating buildings like Union Station, but the high-powered lamps of the time produced a harsh, eye-straining light. Peirce Anderson, technicians from General Electric, and engineers from the railroads experimented for six months before deciding to place 180 custom-built arc lights behind the mezzanine's parapet wall. They used two techniques to reduce the blue-white glare these lamps produced,

covering each with a yellow filter and aiming them at the ceiling so that the light diffused down to the floor. Anderson was delighted at how much the result resembled the daytime atmosphere; the GE technicians were proud that their light meters showed uniform illumination forty-two inches above the ground, the height someone sitting on a bench would hold a book, and the station's owners loved an arrangement in which its men made repairs by walking around the gallery rather than by climbing a ladder.

Work in, around, or connected to the terminal would continue for years. Suburban travelers had to wait until the fall of 1909 to use a new platform that the PRR had promised to build at Seventh Street SW. Only in 1911 did the city finish grading and repaving all the streets that construction had affected, and it would be the summer of 1912 before the plaza opened in a permanent form. Installation of the station's most decorative elements took so long that the *Post* entitled one editorial about Louis St. Gaudens "Looking for Sculptor" and wrote in another "Where are those statues?" The six granite figures above the main entrance finally appeared late in 1912, the forty-six plaster Roman legionnaires for the waiting room mezzanine two years later. Not until 1931 did street traffic actually cross the New York Avenue bridge: before then, the city had not completed the road north of Florida Avenue, and the municipal asphalt plant blocked the southern approach.

On May 1, 1908, a long-awaited telegram arrived at the Pennsylvania's offices above Broad Street Station. It came from Robert Farnham, the company's supervising engineer in Washington and a District native, and his matter-of-fact tone belied the excitement he must have felt both professionally and personally. "I beg to advise you," he wired that Friday afternoon, "that the main waiting-room,

permanent ticket office, permanent baggage room, smoking-room and men's toilet room in the Union Station were placed in service this morning. The temporary structures on the concourse are now being removed, and there will probably be no temporary structures on the concourse tomorrow night." It was the clearest message so far that Washington improvement was ready to begin living up to its name.

II

Union Station's development allowed, even required, other projects. While hundreds of thousands of horses had stopped at the Baltimore & Ohio depot over the past fifty years without drawing much notice, the two teams of five that pulled up in April 1908 found an audience waiting to witness some history. Workmen had almost finished demolishing Washington's oldest terminal, and the horses had come to carry away the last piece standing, the covered wooden ramp that had run from the street to the front doors. Strouse supervised the teamsters as they carefully balanced their 30-foot cargo between the two wagons, which then rattled up to 17th and Gales Streets in Northeast to begin serving a younger crowd as part of one of the District's growing number of public playgrounds.

The people of Washington were even more interested in the removal of the Pennsylvania's facilities. By the spring of 1908, the railroad had pulled its tracks off Sixth Street and given the keys to the depot to the federal government, which now had responsibility for keeping people out. Though some, such as the tramps looking for a place to sleep, were easy to control, others proved craftier. Several government bureaus unhappy with their existing space petitioned to convert the building into their new offices, while part of the business community wanted to make it the convention center the city lacked,

particularly after it hosted a meeting of American Street & Interurban Railway Manufacturers Association and displayed an early airplane.

These proposals played much better at one end of Pennsylvania Avenue than the other. The “economists” in Congress hoped to reuse the terminal, since its adaptation would allow them to reduce federal building appropriations. But Theodore Roosevelt was determined to get rid of what he saw as an eyesore, and do it as quickly as possible, since the station might never come down once an organization or agency established itself there.

Roosevelt quickly discovered that tearing down a building normally required a Congressional appropriation, which was not likely to come soon. The solution to his frustrations came from Secretary of State Elihu Root, who had worked closely with the McMillan Commission while a Republican senator. Root pointed out that the President could tell the Secretary of War to remove obstructions on the public domain and pay for the work with the Army Corps of Engineers budget. The Corps’ long-running interest in the Mall made them quite agreeable to this plan, and Roosevelt quickly issued an Executive Order to raze the station. A few people bemoaned the building’s loss, but most joined the *Evening Star* in wishing it “good riddance.” By the middle of October, a contractor who had bid \$1,300 for the right to keep the salvage had eliminated the depot, and its site became the home of a half-dozen tennis courts.

The transition from the old stations to the new one was still incomplete, however. Perhaps nine of every ten travelers took the trolley to and from the train: it was relatively cheap, automobiles were still rare, and leaving a horse and carriage for an extended period was difficult. When passengers began using Union Station, unfortunately, the nearest car stop—“car” would mean “streetcar” for a few more

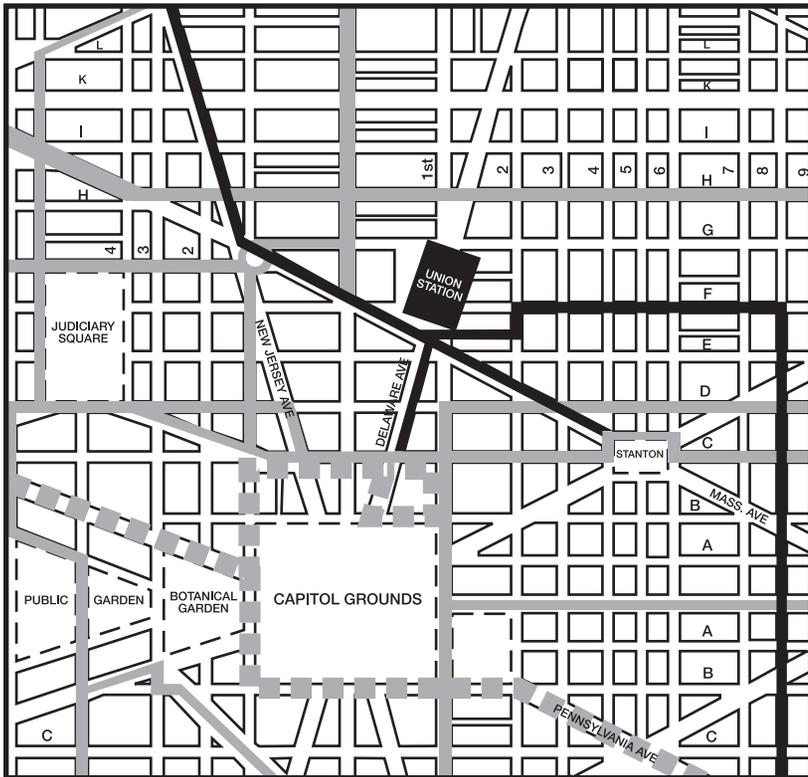
years—was two full blocks away, leaving luggage-laden passengers to make a five-minute trudge in every kind of weather.

This lack of service provided another example of how Congressional control over the city affected daily life. By the middle of 1906, the terminal’s owners, the District engineers, and the city’s two transit companies, Capital Traction and Washington Railway and Electric, had considered more than twenty plans to bring streetcars to the building. They settled on connecting the station to the existing lines through three short extensions: one in either direction along Massachusetts Avenue, and one from the north down Delaware Avenue. Two sets of tracks would circle the outside of the plaza, while four would run by the portico, two for normal use and two in case of accidents or major events. To handle the traffic that the station would generate to and from Northwest, the plan also added a new line on New Jersey Avenue between Florida and Massachusetts Avenues.

Realizing this proposal required a trip to the Capitol. Street railways inspired much of the same ambivalence that steam railroads did: riders loved the mobility they provided, particularly after the introduction of the electric trolley in the late 1880s, but they disliked, even hated, how their owners did business. Municipal governments tried to make transit companies fit the label “public utilities” by requiring them to operate under charters that spelled out terms such as fares and routes. Yet the complaints that appeared in Washington were much like those in other cities, with Congressmen, the Board of Trade, neighborhood associations, and individual citizens objecting to “excessive” profits, the lack of free or “universal” transfers between companies, expensive fares, and too little service to developing areas. Crowding was a particular problem, with one man living at 4th and N Streets NW telling Congress, “it is a standing joke (standing for want

of sufficient supply of seats) that the LeDroit line has smashed into smithereens the law of Physics which affirms that no two bodies can occupy the same space at the same time.”

The trolley companies normally had enough influence to block attempts to amend their franchises, but the need to bring trolleys to Union Station offered residents a rare opportunity. “You never can get a bill...to regulate these street-car systems,” one Representative argued, in strikingly familiar language, “unless you find the time when they will come here and ask Congress to do something.” Critics hoped for an



Existing and proposed trolley routes near Union Station. Grey represents the current tracks: dotted lines for Capitol Traction, solid for Washington Railway and Electric. The black lines are the main suggestions for extensions. (*Jim Peterson*)

exchange like the one that ended grade crossings and produced new terminals: this time, the transit companies would improve service to get access to the busy station.

The analogy contained a serious flaw, however. The Pennsy and the B&O saw clear advantages in a bigger depot—simpler operations and the ability to handle more traffic—and were therefore willing to pay for improvements the community wanted. Capital Transit and Washington Railway, on the other hand, believed their proposed deal had large costs but small benefits. Handing out universal transfers or reducing fares from 5¢ to 3¢ would cut revenues, and new lines into Northeast would not generate enough traffic to offset their expense. Running to the station would produce little extra income, since virtually the same number of people would ride whether or not they had to walk first. Jacob Gallinger, who continued as head of the Senate District Committee, emphasized the point late in 1906, noting that the companies “are not asking for this, but we are compelling them.”

Still, the difficulty of changing a franchise meant that everyone with a proposal now tried to make sure it was part of the bill bringing service to Union Station. In the Senate, Gallinger and his allies defeated a series of amendments—to double the tax on all of the city’s public utilities, to provide additional extensions for Northeast, to require free transfers—by claiming that each might create opposition from the companies that would prevent passage. Better to take them up later, he said, than risk leaving the station without streetcars on opening day, and the original legislation passed the Senate at the end of January 1907.

House members had their own ideas for improving transportation in Washington, several of which made it into the bill that their District Committee produced. It moved the northern approach off Delaware

Avenue to protect the view to the Capitol and called for three new lines through Northeast: along Florida Avenue, down 8th Street, and east from the station along E Street. It also added two older proposals that had failed as separate legislation, one requiring the railroads to operate “smoke-free” locomotives, the other forcing trucks to use wide tires that protected the city’s asphalt by distributing loads more widely.

Joseph Babcock’s attempt to give his adopted hometown one final service then created enormous conflict in the House. The District Committee chairman had lost his seat the 1906 elections, in part, he said, because his opponent had accused him of giving the PRR \$13 million as part of the Washington improvement. He had the House consider his bill to bring service to the station under a rule that allowed sponsors to prohibit any amendments, arguing that the “late hour” demanded such an approach. This method, which could be used only during the last week of the session, infuriated several members, who claimed that Babcock was breaking multiple promises to allow votes on items such as 3¢ fares and universal transfers. Particularly angry was William Hepburn of Iowa, who eight months earlier had sponsored the legislation that gave the Interstate Commerce Commission more power over railroad rates. Prevented from controlling streetcar fares, he had ten minutes of the “hottest kind of an argument in undertones” with the chairman right on the floor. Enough House members had similar, if somewhat calmer, objections that they voted the bill down.

Babcock tried again five days later, this time adding 3¢ fares in order to get the legislation passed. But there was now no time for a conference committee before adjournment, and because Congress still followed a calendar based on agricultural cycles, it would not start its new session until December.

When members returned to Washington, they learned for

themselves the consequences of their inaction. One Northeastern representative reported that upon arriving at the station, “I was exasperated and dispirited because I could find no car to ride to my hotel,” while a Southern senator soon told his colleagues, “I have been walking through the mud to get to that depot as long as anybody else, and I am tired of it.” Local frustration appeared clearly in an editorial cartoon from John Berryman, whose work often ran on the front page of the *Evening Star*. Having mocked Congress several times for its failure to act, Berryman now drew warmly bundled men and women slogging across the unfinished plaza, leaning forward to fight a wind that straightened their scarves; far in the background, across a footprint-filled expanse of mud and snow, was Union Station.

As the Senate took up a new track extension bill in January 1908, Gallinger called the situation a “torment.” That description was characteristically overwrought—McMillan had once said his colleague was “easily...disturbed”—but its cause was easy to understand. If Congress did not act before summer recess, the 100,000 or more visitors to the 1909 inaugural would suffer the same inconvenience. Gallinger was not so bothered, however, that he made major compromises. His bill did extend the Florida Avenue line so it intersected with the existing route along North Capitol Street, but it said nothing about new tracks in Northeast, universal transfers, or lower fares. Most senators found these terms satisfactory and approved them after less than an hour of debate.

The House’s handling of the extensions was neither so quick nor so calm. New District Committee chairman Samuel Smith of Michigan, a McMillan protégé, first tried to provide temporary service to the station; debate almost immediately turned to what the permanent plan should include, and there was so much criticism that one member asked

wryly if the bill for the latter contained anything good at all. After one more public hearing, the District Committee produced final language that showed the House was no more interested in changing its position than the Senate had been. Its version did remove the smoke provision and 3¢ fares, but it still required the new lines through Northeast and universal transfers. It also changed the approaches from the south, even though Burnham had told the committee that coming down Delaware would enliven, not ruin, the view.

The entire House took up the bill at the end of February. On the floor was special guest Joseph Babcock, and on an easel up front was a map of the current and proposed lines. Smith had used the House rules to ensure that there was little chance that anyone would be able to change its terms, and so members used the administration of the District to gain points with their constituents. The transit companies were, as always, a popular target, with Hepburn raging about “absolutely abominable” service and Thetus Sims of Tennessee attacking their profits. No one really argued with those statements, but there was a much more heated response when James Heflin of Alabama tried to insert a clause that would segregate the city’s streetcars. Heflin and the Southern Democrats supporting him knew their proposal would lose—earlier bills with the same goal had twice died in committee—but they played to white voters back home by claiming that Jim Crow cars would benefit both races by reducing tension. This ploy was so transparent that the Republicans, a number of whom had blasted this “un-American proposition,” hooted derisively when a representative from Georgia scolded them for “trying to play a little politics with this question.” The amendment failed, and the bill passed in its original form.

This session of Congress would not recess until Memorial Day,

but District residents soon learned that even three months might not be enough time to get streetcars to the station. Unless either House or Senate members of the conference showed a “radical change,” the *Post* told its readers late in March, “the citizens of Washington will continue to walk to and from the new Union Station until it has become the ‘old’ Union Station.” After the first conference failed, the two sides finally reached a compromise with just two weeks to left, with each side “receding” on two of the four main issues. The Senate allowed the Northeast extensions to stay in the bill and agreed that the ICC, seen as more demanding than Congress, would now regulate the trolleys. The House abandoned universal transfers, particularly once lawyers indicated they were probably unconstitutional takings of property, and accepted the original track layout down Delaware Avenue, since the District engineers had shown that the First Street tunnel, barely below the surface of the plaza, complicated any alternative. The Senate approved this version quickly, while the House heard some final populist shouting about universal transfers before it too approved. President Roosevelt signed the bill the next day, guaranteeing that streetcars would reach the station in time for the inauguration.

Conditions for travelers improved even faster than expected. Included in the legislation was a provision for temporary tracks on Delaware Avenue, and by June 24, free shuttles were running between C Street and the plaza. The permanent work also proceeded quickly, and on December 6, the yellow cars of Capital Traction and the ?? ones of Washington Railway began circling the plaza.

The people along the Washington improvement were often more interested in another extended project. In the summer of 1905, the Commissioners had selected Georgetown Law School graduate A. Leftwich Sinclair to oversee the Congressional requirement that the

government compensate those whose property had lost value because of grade changes. Sinclair was a logical choice, having spent the past several years representing the city when it condemned private land for streets, utilities, and other public uses.

A 1906 amendment to the Union Station Act had expanded the right to file claims from owners in Northeast to anyone adjacent to streets changed to accommodate railroad construction, and so Sinclair and the two building inspectors assigned to him worked all over the city. They generally followed the grading crews, simultaneously adding up the losses resulting from the work and subtracting the benefits resulting from proximity to the station or from the end of grade crossings. They presented this information to a court-appointed commission of three local real estate men, who also accepted testimony from the property owners or from witnesses they had hired. The commission typically met one afternoon a week and considered one square each day, but the process occasionally took much longer. Samuel McDowell, who owned a mill at the southeast corner of Massachusetts and North Capitol, presented more than a dozen “realty experts, builders, excavators, engineers, wreckers, and others” over six days.

The awards the jury started making in 1906 highlighted what a valuable neighbor, at least monetarily, the terminal was. Though regrading had left many homes noticeably above or below the streets, the jury ultimately gave no compensation to 25 percent of the more than 850 claimants. Among those receiving nothing was McDowell, whose 18,000 square foot property now sat twenty-five feet below Massachusetts Avenue and whose \$40,000 mill had to be demolished because the banks of dirt had collapsed its walls. Many others won less than \$200, even though their assessed values often exceeded \$2,000.

Both parties in a case had the right to appeal to a separate seven-

man jury, but continuing could be costly. The jury found one of the District’s first filings so unpersuasive that it actually raised the damage payment, and the government was reluctant to challenge small awards once it calculated that preparing a full presentation cost it \$400. About one-quarter of property owners appealed, but in over 50 percent of those cases, including McDowell’s, the jury upheld the earlier decision, and it occasionally even reduced the award.

Results like these led to dozens of negotiations. The District sometimes sweetened an award in order to avoid a presentation: when Mary Ready, who lived at 44 Massachusetts Ave. NW appealed, the city paid her \$200 to settle even though the jury had given her nothing. More common were the times an appeal by the District led owners to accept less than the original award. Lower rents and prices since 1903 had left many of them short of money, and they realized that they could end up with even less after waiting additional months for their second hearing. The District played on these conditions by offering immediate but lower payments, and the result was often a compromise that knocked 10 to 20 percent from the initial award. More than a dozen owners near the eastern edge of the plaza, for example, accepted settlements that reduced their amounts from about \$2200 to about \$1800.

Compensation for grade changes ultimately added up to \$450,000, about \$380,000 of which went property owners in Northeast. That total, which was shared between the city and the federal governments, was actually \$150,000 less than the Commissioners had estimated in 1903, making damage claims one of the rare parts of the Washington improvement to come in under budget.

III

Union Station's owners wished their finances had turned out so well. Even before construction was done, they were addressing three financial issues—settlements with the contractors, payments from the government, and charges for the railroads using the terminal—and not enjoying any of them.

Money for the contractors fell into two categories. One was the retained percentage, the portion of their payment held until the end in order “to ensure faithful performance of the terms of the contract.” These claims generally settled quickly, for Strouse and his men ordered a firm to redo work if it did not meet their standards. The other, more complicated type of demand involved the supplements. By 1907, most of the original contracts were no longer fully accurate, with revisions changing the scope of work or the type of materials, and firms asking for additional compensation because of how delays had raised the cost of wages and supplies.

Most of these extra claims were negotiated out, with contractors trying to receive as much as possible while remaining on the good side of their once and, they hoped, future employers. A typical settlement paid between 40¢ and 80¢ on each disputed dollar, as the example of the Meader Furniture Company of Cincinnati showed. Meader had bid \$87,000 back in 1903 to install the station's wooden fixtures, including all door and window frames and maple flooring in the upstairs offices, but during construction it had added staff to supervise Thompson-Starrett's relatively unskilled men and had paid extra for labor and materials as it waited for others to finish their work. Since D.H. Burnham & Co. had requested the additional men, Meader collected the entire \$31,000 cost of that change, and it received another \$7,000—out of the \$15,000 it had claimed—for increases resulting

from the delays.

The most difficult negotiations, not surprisingly, involved Thompson-Starrett. The railroad's engineers continued to complain about its work even after the station opened, pointing out that the contractors had left stains on the walls of the baggage room and had not even obtained the granite for, let alone started carving, the statues over the main entrance. Thompson-Starrett continued to believe it was the injured party, as it emphasized late in 1908 by asking for a \$340,000 supplement to its original \$1,700,000 contract. It argued that more than half the additional charges had developed because “we were prevented by the Washington Terminal Co. from completing the work...prior to July 1, 1905,” and its list of thirty-three items might have amused the railroads had it not infuriated them. Among its requests were \$9,300 for depreciation on machinery that had been used longer than planned, \$11,000 for interest on the retained percentage, and \$170,000 for materials whose cost rose because of inflation.

The way the builders pursued this money increased tensions with the railroads' staff. As he had in 1905, Thompson-Starrett president Albert Boardman ignored the contract provision that made the PRR's chief engineer final arbiter of all disputes and tried to negotiate directly with the executives of the terminal's two owners. “I find,” an annoyed Strouse reported to Shand in early 1909, “that Mr. Boardman is using his personal acquaintance with both Mr. Randolph (a vice president) of the Baltimore & Ohio and Mr. Rea of the Pennsylvania to urge the prompt settlement of this claim.”

Strouse and the B&O's Washington attorneys argued against any quick action. “While the amount of money involved is very large, and according to Vice President Horowitz [the Thompson-Starrett officer who admitted his firm knew little about granite] should have been

in the hands of the Company long before now,” counsel John Yerkes wrote, “from our standpoint the Terminal building should have been in our hands long before it was put there.” Until the investigation of the contractor’s claims was over, Yerkes continued, no money should change hands, and if Thompson-Starrett disliked that idea, “they can file suit in the courts any day they select.”

Neither side really wanted a public dispute. Rea pointed out that despite all its moaning, “the Thompson-Starrett Co. is very proud of its work at Washington, it wants to do other work for our companies, and above all things will avoid litigation.” The contractors had, for example, already featured the building in the ads they placed in trade magazines, and they also hoped to win future projects of D.H. Burnham & Co. Nor would having an open dispute do much for the railroads, since the public would likely turn its attention from the glorious new building to all the problems involved in its creation.

Rea therefore had his managers review all the contractors’ claims and pass their judgments on to him and Oscar Murray, president of the B&O. Boardman, Rea, and Murray negotiated for months, occasionally at New York’s Waldorf-Astoria, before coming to a final agreement during the summer of 1909. Thompson-Starrett did get the \$27,000 it wanted to complete the statues and inscriptions for the front entrance, but it otherwise received just \$73,000 of the \$340,000 they had demanded. Since even the railroads’ engineers had supported over \$23,000 of these claims, Thompson-Starrett collected less than twenty cents of each disputed dollar.

Those savings were small comfort to the terminal’s owners. By the summer of 1909, the Pennsylvania had concluded that what had begun as a \$15 million project would run over \$28 million. The station and the sheds, which Burnham had predicted at \$4.3 million, had exceeded

\$5.3 million, largely because of the delays. Complicated filling on the northern approach had tripled its cost from \$2 to \$6 million, while the unexpectedly soft ground had increased the First Street tunnel from \$1.6 million to \$2.2 million. Engineers had estimated the coach and engine yards at \$1.6 million, but the extra digging there sent its actual cost past \$4 million. The work each railroad had done on its own showed similar increases: the Pennsylvania’s track rebuilding in Southwest, for example, had doubled to \$5.5 million. These figures explained why Shand, with the comfort of someone who had not been in charge of the original planning, described himself as “disgusted with the amount of money expended.”

One way for the railroads to improve their ledgers was to obtain their \$1.5 million government payments as soon as possible. Since every week without that money cost each owner \$1,000 in interest, the B&O and the PRR had begun preparing their applications months before either had moved into the terminal. But they could receive their checks only when the District Commissioners had certified that they had finished their work, and the Union Station Act definition of completion was so vague that arguments ran through the spring and summer of 1908.

The trouble for the B&O lay in the subways carrying the cross-town streets under the viaduct. Despite the planning that had gone into their design, water was seeping through the brick retaining walls, forming ice on the sidewalks during the winter and producing a “filthy foul smelling place” during the humid summer. Long skeptical of railroad commitments and in possession of the biggest carrot it would ever hold, the Commissioners now decided to withhold their certification until they were satisfied. But the B&O threatened to sue, arguing that the payment was already due because actual railroad construction was

finished and the Union Station Act said nothing about dry subways. In August the two sides agreed that the company would get its \$1.5 million less \$30,000, the estimated cost of the repairs, which the city would keep until the work was done.

When the Pennsylvania asked for its money in March, it claimed that it had fulfilled every requirement: It had moved into Union Station, given the land on Sixth Street back to the government, eliminated grade crossings, and opened the new Virginia Avenue tunnel. The Commissioners responded that temporary facilities in the terminal meant the building was not “ready for occupancy” as the law required and that the PRR had not even begun the commuter station it had promised for South Washington. Though the first objection disappeared in May, the District continued to insist that the substation be complete before it would issue a certificate. The Pennsylvania then went to court, arguing that this delay was not its fault: the Commissioners wanted the platform on land at 14th Street that Congress controlled, and the railroad refused to begin construction until its right to use that property had been settled. A judge agreed, and the PRR received its check just days after the B&O did. The substation would later open at 7th and Virginia, adjacent to the site the Pennsy planned to use when it first arrived in Washington.

The \$1.5 million payments became part of the final fight over money. Not long after plans for Union Station became public, executives from the Southern Railway told Rea that while they understood its advantages, they were worried that its costs would overwhelm their revenues from serving Washington. The Pennsylvania acknowledged these concerns, which the other tenants shared, but said little else until it began surveying billing practices at other shared terminals in 1906. It discovered that some made every carrier pay a

flat fee, then added charges based on how much each used the gates or maintenance facilities, while others apportioned all costs according to traffic. Stations also varied on whether they calculated per train or per car, and in how they calculated those totals. In Grand Rapids, a train that arrived and departed counted as two, not one; in Kansas City, a locomotive was equal to two cars; in St. Louis, a car whose run lasted less than thirty-seven miles was billed as one-third, since such a short trip was likely to be commuter service that demanded little baggage handling or ticketing.

The Pennsylvania and the B&O began developing figures for their new facilities during the first half of 1907. They estimated both costs that varied according to use, like labor and fuel, and those that were fixed, such as insurance, taxes, and depreciation. They then added in 4 percent of the property’s assessed valuation in order to generate money to service the construction debt and pay a dividend on WTC stock. After allocating the total according to traffic (with engines and coaches each counting as one), they sent tentative numbers to each line in August 1907.

The tenants were outraged. Because of the new Long Bridge, tracks through Southwest, tunnel, station, and yards, their costs to operate in Washington would nearly triple. “This disastrous result,” RF&P President William White told Rea, would force his company into the unsustainable of position of paying \$110,000 a year to serve the city, and so “I must trust that some other plan will be adopted.” Calmly informing his staff that White’s letter was “the first of many protests that we will receive,” Rea told them not to discuss the issue outside the PRR until they had more complete information.

At the center of this dispute was the malleability of railroad accounting. Though they had developed much more sophisticated

methods since the Civil War, carriers still struggled with some very basic questions. On what basis should a company assign fixed costs like track maintenance? Should a high-speed passenger train pay more, since it demanded a better roadbed, or should a heavy freight train, since it created more wear? On what basis should a company allocate revenue from each ticket? Should it be divided relatively equally along the line, or should the city that generated the traffic get most of it? A skillful accountant could set up his calculations to support a wide range of conclusions.

The tenants were also doing some posturing. They knew that their revenues would grow because of their increased traffic, and that their costs would have risen even under the original plan to build two new stations. Nor were the proposed charges as astronomical as White's comment suggested. The B&O had discovered, for example, that the Southern Railway already paid more per car in St. Louis than it would in Washington, even though its revenues from the Midwest were lower.

Almost every possible protest appeared during a five-hour meeting in Washington in October 1907. The presidents of the Seaboard Air Line and the Atlantic Coast Line began the day by claiming that, since their trains in and out of the capital were handled by the RF&P, they were not parties to the new terminal agreement and therefore could not be billed for any extra costs. Rea immediately pointed out that this position, though technically true, ignored the recent history of the tracks between Washington and Richmond. He added that if the ACL and SAL refused to contribute their share, either directly or through the RF&P, his railroad would leave their trains on the far side of the Long Bridge.

The rest of the meeting revolved around comments from W.W.

Finley, president of the Southern. Over the past dozen years J.P. Morgan's money had turned his company from a series of small lines to powerful system stretching from Washington to New Orleans and from St. Louis to Jacksonville. Finley insisted that, since the B&O and the PRR owned the WTC's dividend-producing stock, they should absorb a significant piece of the construction costs before apportioning the rest. He also claimed that the two \$1.5 million payments were a part of the terminal project, and so they should be subtracted from the total on which the 4% charge was calculated, a reduction that would save the tenant lines about \$25,000 a year. The owners disagreed, explaining that the PRR's money had gone to buy out its Mall property, the B&O's to eliminating grade crossings along its two branches. Neither project involved the WTC, they said, and so would not be part of the calculation.

Everyone involved in the meeting understood that most statements were negotiating ploys. The tenants had to keep serving one of the biggest cities on their routes, the Pennsylvania needed southern connections for through traffic, and the B&O and the PRR wanted to spread the facility's fixed costs over as many trains as possible. Compromise began with changes to the terminal's Board of Managers, which would oversee regular operations. It originally included a representative from each of the six lines and from the WTC, but the owners agreed to remove the latter so that the tenants had more authority to control costs. Even more helpful to resolving the conflicts were updated construction accounts: they generated another set of cost estimates that showed the increases would only be about half as large.

The basic operating agreement was finished in January 1908, but fights continued long after. Showing the stubbornness of a small

child, southern lines several times tried to get the two \$1.5 million payments subtracted from the basic valuation. The owners refused to reconsider, and the PRR became so sensitive to this issue that by the middle of 1909, when an announcement for a sale of WTC bonds mentioned “the approval of Congress, which appropriated \$1,500,000 towards this terminal improvement,” Rea made the brokers change the language.

Though the tenants never did eliminate the \$3 million, they found other ways to lower their costs. The draft operating agreement allowed them to review all construction accounts, and the Southern, whose headquarters was located at 14th and Pennsylvania NW, came up with nearly \$1.2 million of what its accountants considered inappropriate charges. The B&O and the PRR ultimately allowed more than \$700,000 of these claims, eliminating \$250,000 worth of real estate never used for terminal purposes and \$400,000 of excess costs from the financing of the station. These reductions saved the Southern approximately \$500 a month (and the other tenants about half that), probably somewhat less than they had expected when they dedicated so much staff time to the audit.

These reviews did have another benefit for the tenants. The Pennsylvania believed that the 1908 draft allowed the Terminal Company to bill users according to a temporary valuation; when the audits had produced final figures, the previous charges would be adjusted. However, the Southern argued that the contract did not require any payments until all disputes had been resolved, and so it refused to turn over the approximately \$10,000 it would be paying. The Southern could keep using that money, while the Pennsylvania and the Baltimore & Ohio, frustrated but without recourse, had to advance the Terminal Company funds to cover the temporary shortfall.

Not until 1912 could the WTC finally place in its files a copy of a final operating agreement signed by all the railroads. For the next half-century, it would be among the most obvious reminders that, for all of its many functions, Union Station was also a place of business.

IV

Before 1907, arriving in the nation’s capital by rail provided little inspiration. The Washington Monument might appear to people coming from Virginia, the Capitol to those from Maryland, but what primarily slid past was stopped street traffic and brick row houses dirtied from years of standing next to coal-fired locomotives. Conditions were similarly dreary at the depots, where the sheds huddled over the platforms and the waiting rooms needed more space and light. The scene outside not much more uplifting, since facing the front doors were billboards and saloons and second-class hotels.

Travelers started to see the advantages of the Washington improvement even before they reached Union Station. The new rights-of-way, particularly in Northeast, lifted them above many roads and rooftops, and the resulting view included both landmarks and the big city beyond. Reinforcing this cosmopolitan feel was the scene as a train rolled to a stop, since to the left and right there were not just two or three tracks, as at the old terminals, but ten or twelve.

Visitors’ initial steps in the capital were not, at least at first, very impressive. Because the fill below the train yard was still settling, only in 1914 did the railroads finally install smooth, permanent concrete platforms. Until then, under foot were wooden 2”x 6”s that soon developed stains and ruts, and even dedicated maintenance could not prevent boards from working loose and putting an extra bounce in the step of new arrivals. Entering on the lower level could be even more

bothersome, since not until 1911 did the WTC bow to Congressional pressure and supplement the stairs up to the concourse with public elevators.

Yet the difference between the new building and its predecessors was immediately obvious to anyone who looked up. Union Station's owners and architects had decided against the kind of shelter made famous by 19th century paintings and photographs, the big metal-and-glass shed that reached across all the platforms. The PRR and the B&O disliked that design for practical reasons: it was expensive to build, needed constant maintenance to offset the corrosion and clouding caused by acidic locomotive smoke, and could cause operating problems. As the railroads were deciding what to do in Washington, future PRR president W.W. Atterbury described the situation in one New Jersey station:

We have had wrecks...due to fog in the shed. We have had suits for damages due to dresses being spoiled by the condensation dropping from the roof, and under certain weather conditions, as you know, the rainfall under the shed is so heavy as to very nearly render the shed itself valueless.

Burnham and Anderson's objections were mainly aesthetic. Their sketches indicated that a shelter that covered all thirty-two tracks would be so tall that it would poke up behind the headhouse, diminishing the building's appearance from Capitol Hill.

Washington instead became one of the first major cities to protect travelers with "umbrella sheds." Down the center of each platform ran cast-iron columns whose fluted shafts and Ionic capitals introduced the station's neoclassical architecture. Painted cream and maroon, colors that would appear throughout the station, the columns extended

fourteen feet up to the shelter's roof, an almost flat "v" that consisted mainly of skylights. Each half of the roof had enough slope to direct precipitation towards drainpipes hidden in the center of every other pillar, and the two wings explained why railroaders sometimes referred to Union Station's "butterfly sheds." Because each shelter had to stop at the edge of its platform to prevent rubbing against big locomotives, passengers could find themselves welcomed by wind-blown rain, sleet, or snow. Fortunately, severe storms were rare, and leaving open the area over the tracks allowed light in and engine exhaust out.

Visible between the sheds was a massive hint about the building to come. Curving down towards the platforms was the glass and tile roof of what new arrivals would soon learn was the concourse. Few travelers walking towards the station would have been able to estimate accurately how tall or wide it was, and that inability did not really matter. They still knew they were about to enter something big.

The transition from outside to in was gradual. The umbrella sheds dead-ended into the northern edge of the concourse, whose start was marked by the twenty-foot tall columns supporting its roof. Passengers now found themselves fully under cover, but not completely protected from the weather. The decision to leave the track side of the concourse open allowed the wind to sweep in, and the lack of heating and cooling meant travelers might sweat or shiver. Also following them in were the sounds of the yard, including whistles from the trains or the men communicating with one another, the clunking of cars coupling, and the huff of steam engines.

What travelers saw ahead, particularly after their eyes had adjusted to the change in brightness, was the iron fence that stretched from one end of the concourse to another. About fifty feet from the end of the platforms and fourteen feet tall, its solid, patterned bottom

section became bars at waist height. It provided an early example of the station's attention to detail, as it had been cast in sand rather than plaster so that its surface would be unusually smooth. About every fifty feet was an exit gate, two eight foot-wide panels mounted on wheels that rolled apart to give crowds room to leave quickly.

Once they were past the gate, travelers began to notice other features of the concourse, especially its size. Seven hundred sixty feet long, 130 feet wide, and 44 feet tall, it may have been large enough to hold all the superlatives it inspired. The concrete contractor boasted in an advertisement that it was the largest single floor in the world, and locals said that either the entire US Army or a tipped-over Washington Monument could fit inside. These claims may not have been true (the Army's ranks of 50,000 would have needed more space, the monument's base, 220 feet on a side, would have needed shaving), but pointing that out would have seemed foolish to anyone in the middle of a room that extended in every direction. Making the area seem even larger was the light washing in from the platforms, from the large windows at either end, from the skylights running the length of the roof.

The train fence included other elements vital to the station's operation. Above the entrance to each gate—there were twenty for the upper level, twelve lower for the lower—were a series of announcements. Angled out so they met at a point were two panels, each of which contained slots into which a gateman could slide cards that identified what waited on the platform: the carrier, the train, its main stops, and the type of equipment it offered. Even higher, sitting on top of a roof styled after a Greek temple, were two metal objects known as hoods. The bottom one was a square with two parts, a sign that announced “DEPART” in three-inch letters and numbers that announced the time that event would happen. The upper one was a ball onto which

four flat panels had been added, each showing the track number to a different direction. Inside the hoods were incandescent bulbs that were turned on when a train was ready to accept passengers. Halfway down the fence was the stationmaster's office, attached to which was a chalkboard listing arrivals and departures.

There was much more to see in the concourse. In the center of the room, offering yet another kind of information, was the rectangular metal stand of the Union News Company. Above the windows at either end, clocks with Roman numerals displayed a fact crucial in any train station. The ceiling ran in five lengthwise sections: three—the two along the edges and the one down the center—were white plaster punctuated with octagonal coffers, while in between were two rows of



Looking west down the concourse. In the center of the image is the newsstand; the black object on the floor in the right center of the picture is a spittoon. (*Library of Congress*)



An entrance gate to the platforms; exit gates, which are to the right or left, are not visible. The umbrella sheds appear in the background, their outlines enhanced by ink lines added to the original image. (Library of Congress)

skylights. From the ceiling hung four rows of powerful but harsh arc lamps, seventy-two in all, that provided nighttime illumination. Under foot was another of the station's careful details: most of the floor's squares and rectangles were the typical gray of Portland cement, but incorporated into the pattern were contrasting maroon sections created by adding dye to the mix. Certain areas had an additional, unfortunate brown tint, the result of tobacco chewers proving unable to hit the

spittoons the WTC had set out.

Arriving passengers continued across the concourse, steering past those preparing to leave. The opposite wall, built from cream-colored brick, displayed more of the building's Beaux-Arts style, including columns, pilasters, and an entablature that continued around the rest of the concourse. Projecting from it, high enough to be seen over the crowd, were wooden signs whose gilded letters explained the services beyond. People who wanted a taxi headed right, to the southwest corner, where doors led to the carriage porch, but most went towards the middle of the room. Nearby was the window for checking parcels, while along the southeast section were entries to the lunch and dining

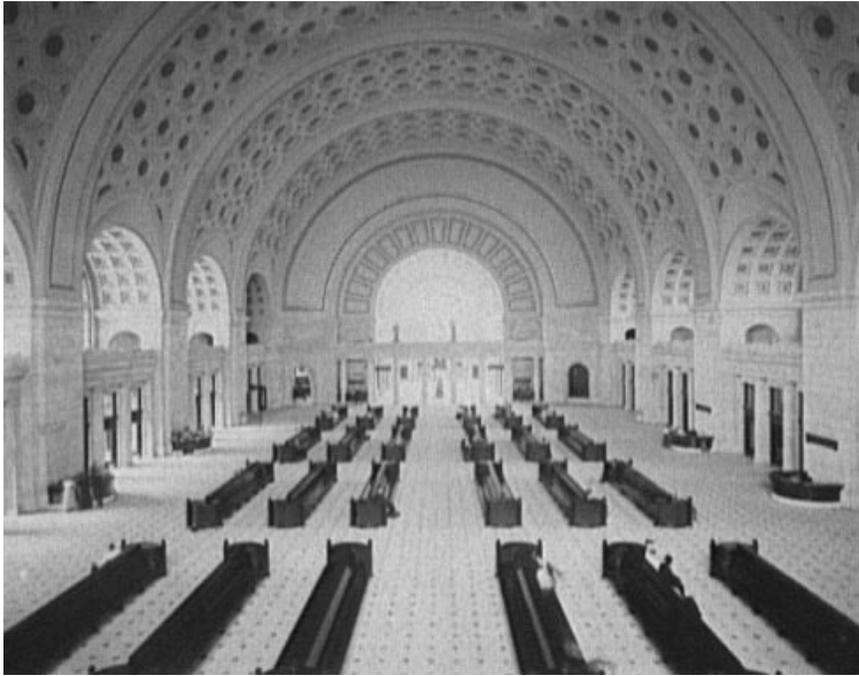
rooms.

Across the wall's middle 200 feet were five bays, each of which held three sets of mahogany and glass doors. Knowing that most people would walk towards this section, since it led to the main exit, Burnham and Anderson had increased its prominence by pushing the bays slightly ahead of the plane of the wall and by framing all fifteen pairs of doors with columns. As they reached for the doors, travelers might notice another of the station's details: at the top of the brass pull plates, just above the handles, were two eagles on either side of a locomotive's driving wheel.

The head house lay just a dozen feet away, past a second set of doors, but first came a vestibule with two vital functions. It helped keep those in waiting room comfortable by creating a buffer with the concourse, holding back summer heat and, through radiators in its walls, by warming up winter's cold. It was just as important architecturally, as it introduced the materials that travelers were about to see. Now continuing the red and white of the floor was marble, not concrete; covering the walls was Bethel granite, and shining at the center of the ceiling coffers was gold leaf.

It was past the vestibule's far doors that Union Station fully announced the importance of its owners and its city. That statement began with the impressive, even intimidating, scale of the waiting room. At 220' by 120' its footprint was barely a quarter of the concourse's, but it seemed at least as large because of its reach upwards. The barrel vault soared 96' feet above the floor, an interior height most people had never seen. In Washington, now the 16th largest city in America, just ?? buildings topped ten stories; in more than a dozen states, only church spires and the capitol were so tall.

Burnham and Anderson emphasized the room's spaciousness



The main waiting room, looking west towards the ticket lobby. On the left and right sides are the counters for sending telegrams and for buying magazines and flowers. The absence of the legionnaires around the mezzanine dates the photo from before 1914.

through another generous serving of light. They filled the upper section of the east wall with a semi-circular window more than seventy feet in diameter. Above the five entrances from the concourse were additional windows of the same shape, here twenty-seven feet across, and the architects included three more on the opposite side of the room, one over each of the doorways leading out to the plaza. Still more light filtered in from the west wing, whose glass ceiling was particularly valuable towards the end of the day. The lofty atmosphere throughout the headhouse made it easy to understand why observers had long considered big-city terminals, as one 19th century French observer phrased it, “these cathedrals of the new humanity.”

The materials that filled the waiting room reinforced a message of power and wealth. The marble that had first appeared in the vestibule now covered 25,000 square feet of floor, with groups of four 24” white squares punctuated with a 6” maroon diamond at the corner they shared. Sitting on the floor were twenty-four double-sided benches, each 800 pounds of polished mahogany; covering the radiators on their ends were bronze grills. In the alcove just east of the main doors was a drug store whose soda fountain featured marble, onyx, brass, and silver; in the west alcove were mahogany and glass telephone booths. Mahogany was also the wood of choice for the counters that stood in between the doorways on the room’s north and south sides: on the former were two stands for sending telegrams, while along the latter were newsstand and a florist. Occupying the remaining spaces between the doors were drinking fountains with basins of granite. That stone also covered the first thirty-five feet of walls, and at the center of the ceiling’s octagonal plaster coffers was gold leaf.

The waiting room also had a distinctive sound. Though conversations could be conducted at any time, just a few people talking at the same time created a hum that made it almost impossible to hear anyone more than ten feet away. The employee announcing impending departures soon learned that during the morning and afternoon rush hours and at the start and end of holidays, even yelling had a limited effect: the background noise turned announcements into babble before they reached the corners. During the teens, station management gave him a megaphone, but it made little difference during busy periods.

Elegance continued through the rest of the headhouse. In the northeast corner, travelers found an arched doorway that led to the lunchroom, which offered refinements superior to many downtown restaurants. Its twenty-eight foot ceilings included ornamental

plastering and gold leaf, and decorative panels—tapestry burlap hand-painted with designs derived from Pompeii, the excavation of which was drawing much attention—ran along the wall. Clerestory windows on the north wall brightened the room, as did the use of a soft yellow paint. The top of the j-shaped counter was marble, while the surrounding stools had bronze bases and mahogany seats.

The dining room just to the south was even more refined. Entrance from the waiting room came through three well-spaced pairs of wood and glass doors in the wall below the big east window; to create an even stronger sense of separation, the doors were screened by a line of eight Ionic columns. Inside was another three-story ceiling, one with skylights and beams painted with garlands. At the top of the walls were more Pompeian panels, these decorated with winged horses and abstract patterns highlighted with gold leaf. Below them alternated cream-colored piers and green alcoves, which together created a rhythm of light and dark. Framing the alcoves were other Ionic columns: their smooth bottoms were maroon, their fluted tops off-white with darker veins. Both the piers and the columns appeared to be marble, but they were actually concrete painted through scagliola, a technique from ancient Rome that allowed architects to obtain the appearance they wanted at much lower cost. Arrayed in front of the walls were tuxedoed waiters, who moved smoothly around furniture of mahogany and leather.

Once the station opened fully, its far eastern end assumed the function for which it had been designed. After President Garfield was assassinated in 1881 as he crossed the main waiting room at Sixth Street, the government and the railroads had agreed that any new station would separate high officials from everyone else. The State Reception Room had its own entrances from the street, its own exit to

the concourse, and even its own toilets; the single route from the rest of headhouse was inaccessible to the public. The three-room “President’s suite” drew on many of the same design elements as the rest of the building, adding Presidential seals and wool carpeting to pilasters, Ionic columns, stenciled foliage, marble, and granite.

Travelers emerging from the concourse often went first to the southeast or southwest corners of the waiting room, to the women’s and men’s lounges, respectively. Their basic designs were quite similar, with twenty-nine foot ceilings, mahogany wainscoting, ornamental bronze chandeliers, and more painted burlap panels. Their floors continued the pattern of white squares and maroon diamonds, though each piece was smaller than in the waiting room. Adjacent to the lounges were toilet rooms, which had lower ceilings and solid white floors.

But the two rooms differed in ways that reflected the time. The women’s lounge was one large area with benches and a few rocking chairs; the men’s was divided into several sections. Occupying its first section was an area for smoking, an activity banned in the rest of station’s public areas and one, therefore, clearly inappropriate for women.



The dining room, seen from near the doors to the main waiting room (*Library of Congress*)

Before the toilets were barbers' chairs, a shoeshine stand, and even a valet who pressed clothes. Such immediate grooming would be needed only by those about to have an important meeting; that group, the station indicated, was wholly male.

The last major section of the headhouse was the west wing. As was true on the opposite side of the waiting room, it was marked off with a colonnade, though here no wall stood behind. An information booth operated between the two northernmost columns, while another counter at the southern end handled tickets for those who stopped over in the capital. Continuing through the colonnade brought travelers the ticket lobby, a name that described only half its activities. Along its south wall were five bays of ticket windows, three bronze-barred positions to a bay. On the north side was the baggage room, accessible through one of four sets of mahogany doors that led to a wooden counter where travelers exchanged their luggage for a claim check. The floor throughout the wing continued the white and red marble pattern of the waiting room, and running down the center were five knee-high oval radiators covered with the same latticed bronze as the ends of the waiting room benches. Overhead was another barrel vault, this one reaching sixty feet up.

The ticket lobby beautifully demonstrated Anderson's skill. His floor plan placed ticketing and baggage—the two services travelers usually wanted first when they came in from the city—conveniently close to each other, and setting them next to the carriage porch gave quick access to anyone who arrived by private vehicle. Putting them off to the side also benefited those who needed neither, since lines at their counters did not slow late arrivals rushing from the front doors to the gates or vice versa.

Anderson also managed to make the ticket lobby distinct but

keep it within the overall design. He used the colonnade to separate it from the waiting room, and the smaller barrel vault emphasized its subordinate status. Yet he also wanted to make its services easy to find and reach, since many people who wanted them would be unfamiliar with the station or in a hurry. Anderson therefore left the space above the columns open, which allowed light, sound, and people to pass easily between the two rooms. His use of materials—marble floors, bronze heater grates, and mahogany—further strengthened the ticket lobby's integration into the overall plan.

Visitors' final moments at the terminal took them back outside. Though some might exit to the carriage porch to find a cab or private vehicle, most left through the front doors. Their encounter with the rest of Washington began under the portico, and those who explored its length found that its domes changed according to the status of those expected to pass below. Over the state entrance were elaborate terra cotta decorations and a Presidential seal; along the front was plain terra cotta; and covering the carriage porch and the liverymen who drove below was a single arch of inexpensive concrete scored in a failed attempt to simulate terra cotta.

In front of the station appeared a sequence of scenes. Running in the driveway's first lane were carriages and cars, while in the second were the long-awaited trolleys. On the other side of the tracks was the plaza, still unfinished but much drier after its 1908 paving, and along Massachusetts Avenue ran carriages and streetcars. Though the land past Massachusetts was still an awkward collection of empty lots and deteriorating row houses, towering over their ugliness was the breathtaking Capitol dome, made even more prominent by the twenty-foot rise up Delaware Avenue. The view from the portico became of Washington's most famous, with a tourist guide capturing

its significance: one of its photos used the front arches to frame the Capitol and carried the title “First Glimpse.”

The station did receive some early criticism, largely because of its size. Employees reported that it was so big that travelers occasionally became disoriented, and a contractor who claimed to have worked on the project (his name does not appear in the records) said that the railroads should have made it half as wide and twice as tall to produce revenue-generating offices. A visitor from Peoria who gave his local paper thirteen light-hearted paragraphs about “the biggest thing in Washington” described the waiting room as “a paved prairie” where “the climate at the south end is different from the climate at the north end, and the attendants speak with a different accent.” He added that the concourse’s width made it a good idea to bring a guide to find the proper gate, and he concluded that, if it was true that New York City would soon have two even larger stations “and I am compelled to walk clear out to my train...I’ll just keep walking until I reach Illinois. It will not be much farther.”

But most people praised, even loved, the building. The man from Peoria said it was like something from the Chicago’s World Fair and emphasized how “white and dazzling” the Bethel granite was. One older resident familiar with the previous terminals admired “a station so full of luxurious comforts,” and a Texas congressman noted that, “like every other person who has occasion to come frequently to Washington I have been impressed with the beauty of that building and have rejoiced in it as a work of art that the whole country might be proud of.” Foreign visitors were equally impressed, with a Briton, an Australian, and a German all saying that Washington’s new station surpassed even Frankfort’s.

Professional response was just as complimentary. Though

it condemned the occasional substitution of inferior materials, the *Architectural Record* concluded, “the effect...is both monumental and charming.” The building became the model for other terminals, particularly the 1915 Kansas City Union Station, which was, despite a smaller size and some other adaptations, “a virtual clone.” Peirce Anderson would design dozens of other significant buildings over the next two decades, including Chicago’s Union Station, but a leading dictionary of American architects called the work in Washington “his greatest achievement.” In 1976, looking back over a century of stations, the Historic American Buildings Survey labeled Union Station “sublime.” Railroad men were equally complimentary, with the superintendent of the New York, New Haven & Hartford using its layout to illustrate excellent design and calling it “a splendid example of the city gate designed in perfect harmony with the architecture of the community.”

Regard for the station extended past words. The PRR’s agent in Elmira, New York, asked for a lithograph of the terminal because it “would be of distinct advertising value.” B&O officials had the same idea, featuring the building on the line’s 1908 timetables and brochures and even referring to the “Baltimore & Ohio’s Union Station.” Visitors found many ways to take the station home with them, buying it on postcards, commercial photographs, and stereographs, two slightly different images placed in a special viewer that enjoyed a burst of popularity before World War I.

Its construction finished, its access improved, its billing established, and its architecture admired, the station had just one final challenge: would it work as a transportation facility?

V

“I had no idea,” the Southern’s W.W. Finley telegraphed Samuel Rea on the evening of November 18, 1907, “that the proposition to use the Terminal Station in Washington...involved such a degree of unpreparedness.” Finley had come over from company headquarters to catch a train south, not to make an inspection, but what he saw drove him to the temporary Western Union booth in the concourse. Admired across the industry for his feel for public relations, Finley warned Rea that continued “serious delays” and “great discomforts” would “create a state of public mind which may be very harmful.”

This report was not news to Rea. Over the previous thirty-six hours, the Pennsylvania had been part of the scramble to end, or at least reduce, the trouble that had appeared since the rest of Washington’s railroads had moved in with the Baltimore & Ohio. The terminal’s workers wanted to improve conditions for the sake of travelers and, as Rea put it, so “as not to give the District Commissioners a chance to get in on the situation.”

Change took a little too long to arrive. Dusk was falling two days later when the engineman of a Southern local from Danville, Virginia prepared to take his train under Capitol Hill. But what he saw fifty feet ahead was not the south portal of the First Street tunnel: it was another locomotive. Someone at the station (it was never clear exactly who) had set a switch incorrectly, which shifted a Charlottesville-bound local into the east (or incoming) tube. At 5:25, the two trains—both moving slowly, fortunately—collided, injuring twenty-one and damaging the two engines, several passenger cars, a mail car, two baggage cars, \$6,000 worth of track, and, once the newspapers came out, the reputation of the railroads.

These initial problems were particularly frustrating because

the station’s owners thought their planning would prevent them. The B&O and the PRR had the opening days in mind throughout the later years of construction, and late in 1906 the WTC Board of Directors had appointed as superintendent George W. Martin, who had formerly been in charge of the PRR-controlled Shenandoah Valley Railroad. Over the next ten months Martin, in consultation with the board, had selected heads for each of his seven main departments, with four men coming from the Baltimore & Ohio’s ranks, three from the Pennsylvania’s. Most of the 1400 other employees moved over from city’s earlier terminals, though there were new hires as well.

One of the challenges facing the workforce was Union Station’s size. The world’s largest terminal until the 1910 opening of Pennsylvania Station in New York, it would always be among America’s five biggest. The headhouse and concourse enclosed over four acres, and whereas the two old depots together had twelve gates, thirty-two platforms now received trains from fifty miles of track. While such spaciousness had huge advantages, such as giving yard crews much more room to assemble a consist, as they called the line-up of cars, it also required communicating across what were, by the standards of the old terminals, great distances.

Those exchanges of information depended heavily on technology. Pneumatic tubes allowed the baggage men in the basement to trade messages with those at the main floor counter, while telegraph wires ran from the station to the towers controlling the tracks and to railroad offices outside Washington. Though telephones were rare enough that the 1908 D.C. phone book needed only ?? pages, the terminal had its own switchboard, complete with backup power, that served ninety-five phones throughout the station and the yards.

Particularly important for communications was the teleautograph,

a now obscure device introduced at the 1893 World's Fair. The sender of a message used a stylus to write on a special metal plate that converted movement into electrical signals; these charges went by wire to one or more receivers, where a mechanical pen reproduced the words on paper. As Strouse noted, the teleautograph was "less troublesome than the telegraph or telephone," since it required no special skills and could send the same information simultaneously to multiple locations. At the station, the transmitter was in the main tower, where workers used it primarily to report arrival times to the stationmaster, the information desk clerks, the baggagemen, and others.

Workers also had to understand a new set of practices. While there were rules that ran across the industry, such as one short blast from the locomotive whistle serving as the universal sign for "stop," many varied according to carrier. Most important to the movement of trains was the signaling system: how did an engineer know to proceed, and at what speed? The board of managers had to set up methods for the rest of the terminal as well, from making repairs to sending bills. Complicating these decisions was the lack of a dominant company, since no carrier would handle more than 45 percent of the traffic.

Union Station ended up being run, in terms of its signals, as a B&O facility. Controlling the trains were metal blades (they had lights on their ends for night-time visibility) that sat on "bridges" running over the tracks. The instructions issued by these semaphores, as they were called in the industry, reflected the positions of a gate: all the way up meant proceed at full speed, which close to the terminal was 15 miles per hour, while parallel to the ground told the engineer to stop. The crews from other lines had to adjust to this system, which might have helped inspire an early complaint about terminal operations. In late 1907, one of the Pennsy's lawyers tried to persuade President

McCrea that the B&O was getting special treatment; two company vice-presidents disagreed, explaining that the B&O's greater time at the station meant it was more "broken in."

The semaphores were the most visible part of the station's interlocking. Early railroad workers had shifted track and set signals by throwing levers located near that piece of equipment, a method that had several drawbacks. The levermen had to work outside, even when the weather was terrible, and because each person could only cover a limited area, the system was labor-intensive. Perhaps most important, it was also dangerous. Employees were always near the tracks and, if they worked at a terminal, had to cross them frequently. Passengers depended on the accuracy and coordination of dozens of people, each of whom might switch a train onto the wrong tracks or set a signal that might mislead about what was ahead.

Interlocking tried to eliminate these problems. First introduced in the 1870s, it connected switches, signals and sensors in ways that made it very difficult for operators to create danger. Once a leverman had moved a piece of track, interlocking prevented anyone from setting the adjacent signals in a contradictory way, such as telling an oncoming train that it could proceed on the same route. While the earliest interlocking had been operated by hand, electricity and compressed air had since allowed the railroads to consolidate the system into a small number of towers, the rather grand name given to buildings that normally looked more like overgrown houses. A tower reduced labor costs, since one man could control multiple levers, and improved communications, because the workers were in the same place.

Interlocking was a remarkable innovation—railroad historians have argued that it should be considered the first computer—but its operation could be enormously complicated. Washington's system,

which Strouse called “the most complete and up-to-date in the world,” spread more than 300 levers over three towers, each of which was located at a major switching area. “A” tower lay below Massachusetts Avenue, at the point where the tracks serving the lower level platforms fed into the tunnel. “C” tower sat near New York Avenue, at the point where both branches of the B&O, the PRR main line, and the leads from the yards came together. Most important was “K” tower, located just south of the street from which it took its name. It stood at the “throat,” the point where the eight tracks leading into the terminal widened into the approaches to the gates.

The interlocking helped indicate the terminal’s condition in its early days. Because the system was not finished when the PRR moved in, men with special keys were throwing switches throughout the yard. The accident near the First Street tunnel demonstrated why interlocking was so valuable, since under full operation it would have prevented the workers from shifting two trains onto the same tracks and giving both the signal to proceed. After the completion of the system in March 1908, the men in the three towers quickly learned how to use their machinery to prevent accidents.

By the end of the station’s first year, the workers were comfortably managing the demands of a typical day. Every 24 hours, between 15,000 and 20,000 travelers passed through on more than 200 arrivals or departures. Towermen routed more than 300 movements (assembling or breaking up a train often required shifting), telegraphers handled 2,500 messages, baggagemen transferred 3000 pieces of luggage and 30 tons of mail, and mechanics serviced 130 engines and 1,000 cars.

Yet to be truly successful, Union Station had to work smoothly during a major event. The first test of that kind was scheduled for March 4, 1909, when William Howard Taft would become the country’s 26th

President. Early predictions suggested that the number of visitors to Washington might reach 200,000, a record number that would have overwhelmed the city’s previous railroad facilities.

Station managers believed they were ready. They had already dealt with smaller surges in traffic, such as the 50,000 travelers over the Fourth of July weekend and an even larger number at Christmas time. Inaugural planners had created a transportation committee, placing Martin at its head, and he had been making plans with his staff and the passenger agents of the lines serving the city. These preparations were slightly unsettled when Martin abruptly resigned at the end of 1908 for undisclosed reasons, but he was soon replaced by A.M. Keppel, xxx.

One of the first signs of the Terminal Company’s confidence came when it chose not to make a request that had become as much an inaugural tradition as the parade down Pennsylvania Avenue. Since the 19th century, Washington’s railroads had been able to accommodate the traffic that appeared every four years only by getting permission from the city to lay temporary tracks in the streets. In 1905, for example, the Pennsylvania had added four sets of rails to Sixth Street, completely preventing the road’s use by other vehicles. Now, however, the WTC did not even apply for such a permit.

The B&O and the PRR did make concessions to the upcoming crowds. They almost eliminated freight service for the first week in March, allowing yards that normally held boxcars to host hundreds of coaches and sleepers. (Because the city lacked enough hotel rooms for all its guests, thousands of them slept in the Pullman cars that brought them to D.C.) The railroads imported dozens of extra men from other parts of their systems: detectives to stop pickpockets, clerks to answer questions at the information booth, mechanics to repair equipment. A first aid station took over the east side of the concourse, while a

temporary baggage stand extended out on the other end. Because crowds made the schedule board on the stationmaster's office difficult to see, managers installed a telautoscope—a king-sized overhead projector—on top of the newsstand, where it beamed the names and tracks of upcoming trains onto a screen on top of the station master's office.

The advantages of Union Station were clear as soon as the first guests began to arrive. No longer did they step off in a variety of spots, including remote yards; now everyone received their welcome to Washington in the same building, one so glamorous it was featured in the official inaugural program. The number of people enjoying these improvements grew rapidly on Wednesday the 3rd. Overnight trains pulled in before 6 am, and by 10 o'clock there were, as a reporter from the *Sun* put it, “[t]rains as regulars, trains as specials, trains as extras, trains of many sections.” By the end of the day, arrivals and departures would total more than 350, 75 percent higher than normal. Highlighting the volume and variety of traffic was the spectrum of cars in the yard: mixing in with the PRR's garnet, the B&O's blue and the Southern's green were exotic shades such as the ?? of the ?? and the ?? of the ??.

The deluge was even more apparent inside. There were National Guard regiments from at least a dozen states and regular US Army units. Political groups poured in too, from 2,000 Philadelphia Republicans to the entourage with Louisiana's Democratic governor. Ohio was particularly well represented, as people came from throughout the state to see one of their own take over the White House. Most noticeable were the bands invited to march in the inaugural parade, virtually all of whom heralded their own arrival by playing their way into the concourse. The echo from the ceiling pleased them, if not every

member of the captive audience.

Numbers and noise kept building. High school boys struggled through the crowds to find visitors and then shepherd them to their accommodations. Police officers arranged those welcoming trains into lines that snaked out to the waiting room and sometimes through the front doors. One observer found that by evening, even “the great open spaces” of the concourse and headhouse “were actually filled up to every niche and corner.”

By the end of the day, more than 50,000 people had flowed through the station. This tide finally ebbed, giving the station force a chance to prepare for an even busier day tomorrow. The cleaning staff removed the jetsam of so many visitors, while yardmen rushed hundreds of cars up to Baltimore, since both the B&O and the PRR planned to send a train south every ten minutes the next morning.

But the second wave never arrived. Wednesday had begun gray and chilly, and the hazy morning turned into a rain so heavy that it was sometimes impossible to see the Capitol from the station. Though many bands pretended that the forecast for “good marching weather” had come true, playing their way downtown and delighting the soggy crowds accompanying them, by early evening the fur coats of so many women had been soaked that one visitor complained his hotel lobby “smelled like a wet Newfoundland dog.” Falling temperatures then changed the rain into sleet, and by midnight snow had become the day's third type of precipitation. Slush began to cover the streets, slopping down faster than District crews could clear it away.

The next morning showed that even the most modern railroad facility was no match for a blizzard. The weight of accumulated snow and ice and a strong northwesterly wind pulled down almost all the telegraph lines along the PRR and the B&O, and by 5 am, twenty-two

trains were stalled between Baltimore and Washington because wires, poles and snow drifts blocked the tracks. Their crews tried to clear the obstacles and learn by word of mouth what lay ahead, but they could only creep along one and two miles at a time. An overnight departure from New York, timed so its passengers would arrive for the noon swearing-in, dragged into the city around 4 p.m.; one train back to Baltimore took six hours to cover the thirty-eight miles. And tens of thousands, from college girls to Civil War veterans, never left their hometowns because there was no equipment to carry them.

People adapted as best they could. Walking around the White House early that morning, Taft joked, "I always said it would be a cold day when I got to be President." His swearing-in was held inside the Capitol, something that had not happened since the railroad came to Washington. Thousands of people stood for three hours along Pennsylvania Avenue to see the parade, which went on as planned thanks to hundreds of shovelers. Though smaller crowds limited normal business, there were markets for a few items, with salesmen charging up to \$5 for rubber boots that normally cost \$1. Many viewers and marchers tried to block out the cold through a time-honored method: they drank before, during, and after the parade. The result puzzled one boy living on North Capitol Street, who watched as members of a well-fortified military band staggered back to their sleepers in the Eckington freight yard. "The beer," his mother explained as she stood beside him on their porch, "has gone to their toes."

Union Station never fully shut down. Limping in throughout the day were trains filled with passengers eager to eat after many hours onboard. Workers lit smoke pots to keep switches and signals from freezing, and linemen headed north to rehang wires. There were also occasional departures, their consists patched together from whatever

cars had made it to the city. Almost all were standing room only; one exception was the special carrying Teddy Roosevelt back to New York, and even his trip started four hours late. By evening the station was packed with people who could not leave but had nowhere to stay. They turned the building into the capital's biggest boarding house, with more than 1500 of them sleeping on the waiting room benches, in the lounges, or along the concourse.

The station remained jammed for two days. The sun reappeared the next afternoon, part of a general clearing that helped service improve. Southbound trains moved the most easily, as a few extra degrees had meant more rain, less snow, and therefore fewer downed wires. The Pennsylvania re-established one telegraph line and sent off most of its trains, though they left from one to eight hours late. The B&O had more trouble, struggling to get men to downed wires and to sections of track drifted over. The still-limited schedule meant crowds rushed from gate to gate each time a train appeared, each person



Inside the carriage, on their way to the Capitol, are Taft and Roosevelt. (Library of Congress)

hoping that this would be the ticket home. The dining room and lunchroom had run out of food on the day after the inauguration, adding another discomfort on those filling the benches and spreading into the unheated concourse.

About the only fun came from musicians who still wore the mud-splattered coats and wet shoes they had acquired from marching in the parade. The members of the 12th Regiment band of the Pennsylvania National Guard, given “station liberty” by their commander, produced an impromptu concourse concert. They swung from the latest ragtime hits to operatic selections; joining in on vocals at times were 500 of their fellow Pennsylvania militiamen. They then turned to waltzes, with other troops grabbing female dance partners out of the crowd, and ended their performance with the “Star-Spangled Banner” and “America.” When their trains finally pulled in, the regiment marched out by playing two of the day’s popular songs: “Bye-Bye Baby, See You Later, Maybe” and “And He Walked Right in and Turned Around and Walked Right Out Again.”

By the end of Saturday most everyone was home, or at least en route there. There was still a “non-communication” zone north of Baltimore where downed wires made travel slow, but telegrams from New York (often via Pittsburgh) confirmed that trains were now making it through. Equipment also began returning from earlier trips, allowing those waiting in the station to board. Most left late, but that still seemed like great progress after the previous seventy-two hours.

As routines resumed, visitors, residents and elected officials began to talk about what had gone wrong. Many initially focused on the date of the inauguration, saying that holding the event so early in the year made its disruption by a winter storm too likely. They suggested moving it to late April, forgetting that rescheduling it into the spring

would increase the gap between when the new House, Senate and President were elected and when they took office. This concern about lame-duck officials gradually outweighed those about the weather, and in 1933 Congress shifted the event to its current date in mid-January.

Other complaints focused on the station and its management. The rain before the snow had made the plaza “a sea of red mud.” Though bands had enjoyed marching through the building, their decision to form up there had further congested the already full platforms and concourse. The *Baltimore Sun* worked a sensitive subject into its criticism, asking why a facility that had received \$3,000,000 in government assistance kept “trainload after trainload of passengers... standing for hours in railroad yards” and why departing “trains were not made up on schedule.” The answer, said the anonymous experts the reporter cited, was that there was obviously “something wrong either with the building, the tracks, or the railroad men.”

Some of these attacks were exaggerated, even unfair. Nearly 40,000 passengers used the station on Inauguration Day, half the expected number but twice the normal one. Some trains did wait in the yards on the 3rd and the 4th, but the vast majority did not. And only someone who was not paying attention would fail to understand why departures “were not made up on schedule.”

Yet it was also clear that the terminal could work better, and changes over the next four years tried to address the problems of 1913. The District and the federal government had finished the plaza, eliminating the mud and giving bands an outdoor spot at which to assemble. The owners made more than \$130,000 of improvements, including new crossovers that gave the towermen more alternatives for shifting trains in case a gate or a track became congested. Carriers rearranged the consists of their arriving trains to make it easier to

remove specific cars after passengers had exited, and workers stretched ropes between the train fence and the concourse wall to organize both arriving and departing passengers. There would still be some complaining, but the *Post* concluded, “It is doubtful whether any city in the world ever entertained 300,000 visitors more satisfactorily than did Washington.”

Though such praise was absent from the station’s first big party, most guests in 1909 seemed happy with the station. Typical were the comments of the *Cincinnati Enquirer*, which reported to Taft’s hometown, “the new Union Station meets with rural as well as metropolitan approval.” As the snow melted away and operations returned to normal, those who used or worked at the terminal concentrated on discovering its place in the life of Washington.