PART 5: PENN STATION OPENS AND A SUBURBAN COLOSSUS EMERGES

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An End to the Beginning: The Long Island Rail Road Makes Ready for the Opening of Pennsylvania Station

Even as the officialdom from both railroads was playing up the start of operations into Pennsylvania Station during the spring of 1910, related construction and other improvements were continuing to engulf the Long Island Railroad. Some were projects directly related to the New York Terminal that were delayed in completion; some were late-stage add-ons and just getting started; and others were natural upgrades that had no relation to the project at all. Whatever the case, each of these elements would eventually combine to create the classic suburban rapid transit railroad which came to personify the L.I.R.R., and still does a century later. Starting on June 16, 1910 electric trains from the Rockaway Beach Division began using the "Glendale cut-off" (that is, from both Rockaway Park and Far Rockaway to Long Island City, but excluding the "Loop" route through Valley Stream and Hammels) as an alternative to the Atlantic Division. These used newlyinstalled third rail past Woodhaven Junction and on the Main Line, including the newer trackage from Glendale to White Pot Junction, and from White Pot interlocking at Remsen Lane to the area of Sunnyside Yard, as far as the Hunters Point Avenue overpass. rerouted to Penn Station when it opened three months hence, they were stopped before entering the large mass of grade-level switch work that preceded the Long Island City terminal near Borden Ave., all associated with Tower 1 interlocking, which was then so complicated as to defy any attempt at third rail installation. Electrification of the terminal and its special work was omitted as a result, lest its use result in uninterrupted "gapping" and hazardous arcing which could confound operations and damage equipment. This situation was very much like that at Penn Station's Tower "A" which led to the Pennsy's use of overhead third rail at the west end of the terminal in Manhattan, but in this more traditional setting there was no such option so the L.I.R.R. simply curtailed electric train operation short of the interlocking and conveyed the otherwise-self-propelled coaches into its terminal with steam switchers. At Glendale Junction itself, an

interesting new station called "Matawok" (for the nearby Matawok Land Co.) was built between Trotting Course Lane and Myrtle Ave. on the grounds of the Weike Ribbon Factory. Informal use appears to have begun just after the nearby station at "Brooklyn Hills" was shut, with a more formal and very slim schedule of trains stopping there when service to Penn Station was started on the Rockaway Beach Division.

As spring progressed into the summer of 1910 and the Penn Station opening pulled ever closer into view, other measures were being taken to meet its expected challenges to existing capacity constraints, if not in terms of ridership then certainly in terms of operational integrity. As previously mentioned, third rail was finally added to the middle track of the Far Rockaway Branch in Queens, years after its 1904 triple-tracking, in an effort to create a better operational fit with the Ocean Electric. As part of overall electrification of the L.I.R.R. Main Line, the fourth track provided for in the 1909 "Maple Grove Relocation" (and now extended to "AC" Tower) was also finally laid between Metropolitan Ave. and a point just shy of Van Wyck, which in turn obviated the presence of the "Brighton Jct." lead to the Atlantic Division and direct access to Brooklyn. This process also foreshadowed a third reconfiguration of the L.I.R.R. through Jamaica, for which the first related street work commenced on the northerly perimeter July 26 to form a new alignment for Archer Avenue (previously short, narrow Archer St.) and provide a temporary right-of-way through the future work zone, while construction was also begun to reposition Beaver Street on the southerly side. Both tasks were intended to allow a massive elevation of the right-of-way through the site of the new station, whose large building foundation lines were first surveyed the following day across what was then Carlton Street, a side road that was later to become Sutphin Blvd. A newer and enlarged elevation then took shape through the area of the new Jamaica station over the following couple of years, built from sandy spoils garnered at another of the L.I.R.R.'s track relocation projects in distant Cold Spring Harbor on the branch to Wading River. To provide additional capacity for the projected needs of forthcoming

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"Rockaway Loop" and Long Beach M.U. service to Pennsylvania station, a "fourth" electrified track was also added on the "Old Southern" alignment through Springfield Junction, from "SM" Cabin just east of Laurelton station as far as "VN" Cabin just west of Valley Stream. Included was a second high platform at Rosedale station for eastbound trains, located on the south side of the new track, which made the older (1906) installation in the middle a dedicated westbound stop. An entirely new gantry-style "SP" Tower was also built across all four tracks, replacing both the original wooden version from 1880 and the interim "cabins" created during the 1906 electrification, which were abolished soon after its completion.

Though still relatively new to its role as a suburban branch (as opposed to the original purpose of being a seaside excursion railroad) the former New York & Long Beach was also remade into a recognizable form of the Long Island Rail Road's "Long Beach Branch" ahead of its start of service from Pennsylvania Station. Past "VN" Cabin at Valley Stream, where the branch to Far Rockaway diverged, two additional electrified main tracks were laid starting that spring along the southerly edge of the original South Side survey as far as Lynbrook station. "PT" Tower, which had overseen divergence of the branch to Long Beach since its beginning, was closed and removed, with the junction from then on being remotely-controlled from "VA" Tower at Valley Stream. The existing Lynbrook station layout with separate platforms for main line and branch to Long Beach remained, but from there a new track was added to the original New York & Long Beach right-ofway, which combined with the original single iron to create an electrified 2-track branch through South Lynbrook as far as Ocean Avenue. There the line reverted to a modified (and now electrified) version of its original single-track state, crossed the Mill River and continued into East Rockaway, proceeding from there to Long Beach as previous. Like Penn Station itself, each of these new tracks and their associated electrical facilities were (in general) completed as of August 27, 1910 and all was in apparent readiness for the service extension to Manhattan. L.I.R.R. employee familiarization "drills" on each of the electrified lines that were to receive trains from Penn Station began by the middle of that month, simulating most facets of the new operation. Personnel acclimation on non-electrified routes was deferred to a later date when the rolling stock for their inclusion at the new terminal became available.

With the addition of two new local stations between Penny Bridge and Bushwick Jct., lower profile changes were also accomplished in September 1910 on the existing Montauk Division (former Southern) main line that weren't directly related to the opening of Penn Station but rather a response to its own ongoing operations. One was Habermans, located at Berlin (50th) Street off Laurel Hill Blvd. (56th Road) and carried the name of a historic tin mill on the banks of Newtown The original company, later succeeded by Creek. Continental Can, produced cups, plates and cutlery, among many items, for over a century and a half, its latter-day plant on 55th Avenue being served by L.I.R.R. local freight trains into the early 1980's. The other was the third L.I.R.R. station to be called "Maspeth," this time located near the Grand Ave. underpass (which survives in 2014, albeit rebuilt) at approximately Hebbard Ave. (58th Drive). It was also at about this time that the second track was removed from the branch to Bushwick terminal, while yet another attempt was made to institute a station stop in the industrial area which had consumed the Bushwick Branch, this time somewhat more successfully on the south side of the grade crossing at "Metropolitan Ave." A pilot "battery car" was placed on a year-round shuttle between Bushwick and Bushwick Jct. (Fresh Pond) beginning on April 1, 1911, being succeeded by a two-car set after June of 1913. The first unit was delivered by Federal Storage Battery and carried the description "Beach-Edison" car, while the second was built by the Railway Storage Battery Co. (which may have been another name for the same concern), but whatever the case they looked like miniaturized trolleys or express motors, supported on a widely-spaced pair of single axles. As configured by 1914, car #1 was a Combine and #3 a "coach," with each having plugs that recharged the batteries for every trip at either end of the line. This couplet provided all Bushwick Branch service until it was discontinued on May 13, 1924.

A New Era Begins-Number 1: Electric Commuter Trains from Penn Station

Starting on August 30, 1910 two daily inspection trains were officially sponsored by the Long Island Rail Road for each of the next four days. Guests were boarded by special invitation at the "commuter" side of Penn Station (Tracks 14-21), though each day a complementary P.R.R. Special was separately dispatched from Philadelphia to

accommodate that company's participating officers. The well-polished L.I.R.R. charters (consisting of brand new MP-54 M.U.'s) proceeded out of Penn Station via the asyet-idle but complete Tower "A" interlocking and through the North River tubes to the westerly portals beneath Bergen Hill. From there they reversed course through Penn Station and traveled all the way to Valley Stream on the new, fully-electrified route via Beaver Street station in Jamaica, then returned to Manhattan via Far Rockaway, the Glendale cut-off, White Pot Junction and Sunnyside. Dry runs on both sides of Pennsylvania Station were going all-out by September 3, for not only were fully-crewed Long Island Rail Road trains meandering to and fro, but the Pennsylvania Railroad was by then making deadhead trips with regular consists from New Jersey to Sunnyside and back, including carefully-supervised and hand-timed changes of motive power at Manhattan Transfer. So were such skills collectively honed across the Labor Day Weekend that year, and after a final round of executive meetings, reflections, evaluations and minute adjustments, all that a full decade of enterprise had accomplished was, at long last, deemed ready for conveyance to (some of) the riding public.

Almost as soon as public notice of the Pennsylvania Station's "Grand" opening hit the New York newspapers on Sunday, September 4 groups of people began to assemble on the sidewalks outside its locked doors. The property even then was still in its last throes of construction and secured by officers of both the Pennsylvania Railroad and city of New York, who made occasional rounds and tried valiantly to keep order among the growing legions whose curiosity could hardly be contained through so many years of anticipation. As those with true insight were aware, the terminal's first duties would be centered on its Long Island Rail Road component and therefore lack the totality of function that was expected to overwhelm the site when its true owners finally began to use it, as well as continue to conceal the magnificence held within. This is not to imply that the L.I.R.R. would simply supply passenger service out of Penn Station; as time went on there would be baggage, express and even mail to outward points but for the interim, and certainly from the Pennsylvania Railroad, connecting passengers would remain captive to the Hudson River ferries and vagaries of Manhattan's local transportation network to even reach either Penn Station or the L.I.R.R. at Long Island City. This body represented a healthy percentage

of the new terminal's future potential ridership, which for the time being was denied its immediate benefit.

Setting a trend for what could be eternity, the first of the terminal's doors were opened to the public at 3:01 a.m., in the pre-dawn hours of Thursday, September 8, and throngs of relieved Americans poured in after growing crowds had been milling about on Eighth Avenue and West 33rd Street for almost two full days. As intimated above, the entire gathering was shepherded through the Eighth Avenue end and "minor" entries on West 31st and West 33rd Streets into the lower "Exit" Concourse, glimpsing but being diverted away from the more grandiose Main Concourse, Main Waiting Room and Arcade portions which would not be available until the Pennsylvania Railroad's operations were begun. The terminal's very first revenue move took place even as the body-bunched excitement above was still novel: schedules were distributed; questions answered (or not); and in some cases tickets to ride the new trains sold through the cramped, subterranean L.I.R.R. Ticket Office for true purpose or as a lark to the holder. At 3:36 one of the L.I.R.R.'s motor-baggage combinations (the actual unit lost in time, but an MP-54 coupled to one of the new MPB-54's) escaped for Woodside station, where its cargo of New York "bulldog edition" newspapers would be forwarded cars and all to Port Washington by steam engine. The first outbound passenger train of still-new MP-54 M.U.'s (schedule number 1702) was loaded after the manned control gates in the lower concourse were opened at 3:30, then departed from the oversized platform at Track 19 with the first passengers amid news photographers and a celebratory fever at 3:41 a.m. It followed the newspaper train to Woodside, where those bound for either Port Washington or Whitestone Landing were discharged onto the cramped low platform (a stubborn reminder of how archaic some aspects of the L.I.R.R. remained) and retrieved by a steam-powered consist that was sent from Long Island City to follow the M.U.'s. The electric train then continued on to (old) Jamaica, where separate connections were made available for other outward points whose steam-powered trains also originated at Long Island City and followed either the Main Line or Montauk Division across Queens. After Penn Station's first inbound set of MP-54's arrived (also from Jamaica) at 4:34 a.m., its second outbound train was the following M.U. interval to Jamaica seven minutes later, at 4:41 a.m., and so was set in motion a momentum of operation that has continued for more than a century. At the more

conventional hour of 9:32 a.m. another official train of MP-54's left Penn Station for Jamaica carrying railroad, city and suburban officials, who then hustled about Queens and Nassau Counties attending a variety of bunting-festooned "Tunnel Day" public celebrations. One of the most famous of these was held in Lynbrook to commemorate ascension of the humble New York & Long Beach to suburban rapid transit status; another late in the day at Garden City included an extended banquet in honor of L.I.R.R. President Ralph Peters.

Despite extensive pre-opening preparations, comparatively incomplete status of that initial multipleunit trip described above was symptomatic of things as they would be in certain precincts for months and even years to come. At the new terminal itself, even the completed rail facilities were only partly activated, with all Long Island Rail Road trains kept strictly between Tracks 14-21 and only passing through Tubes A and B beneath 33rd Street (which were intended almost exclusively for L.I.R.R. use from the outset). There was only a rushed, temporary trackage rights agreement in force between the two railroads on that day to permit the station to open, but a finely-tuned and permanent accord was signed into effect by the two presidents (Peters and McCrea) on September 14. Pennsylvania was willing only to staff Penn Station Towers A and C full-time at this juncture along with "F" and "H" on the Queens side, while those at "KN" and "JO" were held back until such time as the company's own trains started running (though they were being used on an instructional basis), as were the facilities at Sunnyside Yard. Nevertheless, there were several suburban routes which could now truthfully call Penn Station home, and in the enterprising spirit of the time this was not at the expense of service already being offered from the L.I.R.R.'s existing termini. When its side of Penn Station opened, the L.I.R.R. had no less than five fully-electrified routes serving three jurisdictional "Divisions," plus one temporary shuttle line. In time these would be joined by six more outward destinations in non-electrified territories that stretched as far as Greenport, almost 95 miles from the banks of the East River. Several had multiple routings available; at least a couple of them were confined to the most populous districts and did not serve their entire piece of the railroad. In sum, the L.I.R.R.'s lines from Penn Station were designed from the start to be a 20th century regional transportation tool for those needing practical, economic or leisure-time access between the outer

reaches and New York City. This was wholly different in nature from the 19th century railroads which had crisscrossed Long Island for the intended purposes of agricultural, industrial or recreational travel.

On September 8, 1910, electrified service was operated on the following complete routes, in general using MP-54 type steel Multiple-Unit equipment, and with a controversial 14 cents extra tacked onto each fare to cover a per train rental fee paid to the Pennsylvania Railroad:

- Rockaway Beach Branch: Penn Station to Rockaway Park via White Pot Jct. and Hammels. Stops at Woodside, Winfield, Matawok, Woodhaven Junction, Ozone Park, Aqueduct, Ramblersville, Goose Creek, The Raunt, Broad Channel, Hammels, Holland, Steeplechase, Seaside and Rockaway Park. Summer Specials were operated express to Hammels starting in 1911.
- "Far Rockaway Loop" via Hammels: Penn Station to Far Rockaway via White Pot Jct. and Hammels. Return via Valley Stream and Jamaica*. Stops at Woodside, Winfield, Matawok, Woodhaven Junction, Ozone Park, Aqueduct, Ramblersville, Goose Creek, The Raunt, Broad Channel, Hammels, (Olde) Arverne, Arverne (Straiton), Edgemere and Mott Ave.-Far Rockaway. Summer Specials were operated express to Hammels starting in 1911.

*-May return to Flatbush Ave.

- "Far Rockaway Loop" via Jamaica: Penn Station to Far Rockaway via Jamaica and Valley Stream. Return via Hammels and White Pot Jct.* Stops at Woodside, Winfield, Forest Hills, Hillside, Jamaica (Beaver St.), Cedar Manor, Locust Avenue, Higbie Avenue, Laurelton, Rosedale, Clear Stream Rd., Valley Stream, Hewlett, Woodmere, Cedarhurst, Lawrence and Mott Ave.-Far Rockaway.
 - *-May return to Flatbush Ave.
- <u>Hempstead Branch</u>: Penn Station to Hempstead via Jamaica and Floral Park. Stops at Woodside, Winfield, Forest Hills, Hillside, (old) Jamaica, Rockaway Junction, Hollis, Bellaire, Queens (Village), Bellerose, Floral Park, Stewart Manor, Nassau Blvd., Garden City and Hempstead.

- Long Beach Branch: Penn Station to Long Beach via Jamaica, Valley Stream and Lynbrook. Stops at Woodside, Winfield, Forest Hills, Hillside, Jamaica (Beaver St.), Cedar Manor, Locust Avenue, Higbie Avenue, Laurelton, Rosedale, Clear Stream Rd., Valley Stream, Lynbrook, South Lynbrook, East Rockaway, Atlantic Avenue, Jekyl Island, The Dykes, Wreck Lead, Queenswater and Long Beach. Summer Specials were operated express (probably Penn Station to Jamaica to Valley Stream) starting in 1911.
- Main Line Shuttle: Electric multiple-unit cars were also operated on an interim shuttle service as described above, from Penn Station to Jamaica via Main Line. This made stops at Woodside, Winfield, Forest Hills, Hillside and (old) Jamaica, connecting with steam trains from Long Island City to Whitestone Landing and Port Washington at Woodside (which in turn were cut or joined at Great Neck Jct.). It also met with steam trains from Long Island City to additional points (Oyster Bay, Hempstead via Mineola, Mineola via West Hempstead, Hicksville, Babylon and beyond) at Jamaica.

On the day that those first Long Island Rail Road M.U. trains commenced revenue operation to Pennsylvania Station, the Main Line across Queens exhibited a mixed bag of rights-of-way; in part on the original road bed which included grade crossings, in part grade-separated and in part relocated. To summarize, trains escaping the East River tunnels found a 6- to 8-track right-of-way through the Pennsylvania's Sunnyside Yard complex, which sorted into four tracks for the L.I.R.R. Main Line and two for its "North Side Division" (Whitestone and Port Washington Branches). As it passed Laurel Hill Ave., the line arced around a long 90° curve and merged into the existing four tracks of the original line just past the 1908-opened 1st (54th) Street overpass, two each for the Main Line and North Side. The Woodside Branch diverged from the latter by its namesake station, where the tracks then swung gracefully back through numerous, concentrated urban grade crossings (each individually and manually attended) in the former village (and now burgeoning neighborhood) of Woodside.

Just after the two North Side tracks cut away at Winfield Jct., the Main Line still spread to 3 tracks at Maurice

(51st) Ave., then passed onto a newly-completed 6-Track elevation at Remsen Lane (63rd Drive), as initially rebuilt in 1908-09 for the Glendale cut-off. There it began pursuing its unwavering survey through what had once been the rural Queens County municipalities of Newtown and Jamaica, which by this time were transforming into such steadfast areas as Rego Park, Forest Hills, Richmond Hills and Kew Gardens. All six tracks (four for the Main Line bracketed by two for the Rockaway Beach Division) continued through a grade separated junction as far as Herrick (70th) Ave., from there reverting to its enhanced (1907) state of 3-track width through Forest Hills station. At Ascan Ave. it entered the 1909-opened Maple Grove realignment and followed it as far as Metropolitan Ave. (including the local station at Hillside), with the fourth iron finally being installed and electrified after it was roughed in during original construction. The four electrified tracks then continued as far as Lester Ave. (135th Street), just one block shy of Van Wyck, before consolidating back to two for "AC" Tower interlocking, where they merged with the Atlantic Division and took aim at (old) Jamaica station.

As aged, abrupt and messy as its end was at the time, this arrangement of the Main Line would prove to be short-lived; immense improvements to support the new Jamaica station would soon bring extensive revisions to all junctions in that entire area. Nearby on the Glendale cut-off, a temporary set of low platforms called "Brooklyn Manor" were also opened in November 1910 on the north side of the original Jamaica Ave. overpass, which dated from the 1880 start-up. This was intended for use by Rockaway Beach Division trains serving Penn Station (as well as those destined to and from Long Island City) and acted as a better-located replacement for the former Brooklyn Hills. The permanent station would be situated on the south side of the Jamaica Ave. overpass and consisted of high wooden platforms with substantial shelters and electric lighting. Its construction lagged into the winter of 1911, and it was finally ready for public use as of January 9. The overpass itself was effectively replaced by 1914 when it was enlarged and reinforced in part to provide improved access to the station.

A New Era Begins-Number 2: Issues With Rolling Stock

As an after-effect of A.C.F.'s post-strike backlog and continual post-production refinements of the otherwise DD-1 locomotives, overall equipment availabilities remained a problem for both of Penn Station's resident railroads through the end of the year. By December 31, 1910 the Long Island Rail Road had received a total of 150 MP-54 M.U. motors, 15 MB-62 Baggage motors and 15 MPB-54 Baggage "Combinations" to cover the needs of its electrified system in addition to the MP-41/T-39 and MP-41/MB-45 tandems that had been running for several years. The only steel coach also on hand was the same P-58 class prototype delivered in 1907 (1451, originally 1401), which by the end of 1910 had been converted to a "Club" car and was being used in company with traditional wooden equipment. There were 10 other steel "production" cars on the property as well (682-691), but they were B-62 class Baggage cars and of little help in expanding passenger service. Between this limitation and the Pennsylvania's own tardiness in establishing its operations into Manhattan, any hope of initiating Long Island Rail Road through service from East End points was forced to await a longer-term resolution to the equipment shortage and qualification requirements. Neither was the L.I.R.R compelled to pursue the acquisition of more steam locomotives to meet additional service needs that might be generated by the opening of Penn Station; in 1910 the company had a strong stable of approximately 154 passenger engines in 4-4-0, 4-4-2, 4-6-0 and even 2-6-2T configurations, about one-third of which were of the "Camelback" type, with all between 4 and 28 years of age. The majority of this motive power collection went on to serve the L.I.R.R. into the 1930's, by which time the second round of electrification and next generation of "G-5s" steam engines had taken hold. The final five 2-6-2T "tank" engines described above had been the last acquired from Baldwin in 1904 for latter-day steam-powered rapid transit service, and were sold to the Central Railroad of New Jersey soon after Penn Station's opening in November 1911. Renumbered to 220-224 in their new home, they remained active until the end of World War II.

A New Era Begins-Number 3: Penn Station's Operational Coat-tails and Other Issues To Be Dealt With

Soon after the Pennsylvania Railroad had received sufficient quantities of DD-1 electric locomotives and

steel coaches, and after its personnel had continued to train for their new work routine right up to the final minutes beforehand, the remainder of Pennsylvania Station, plus all attendant facilities including Sunnyside Yard, was opened for revenue service on November 27, 1910. This included all intercity trains, most of the company's regional (i.e., Northeast Corridor) service and a healthy percentage of its commuter traffic from New Jersey points, all of which was required to undergo a motive power change at Manhattan Transfer. The new Penn Station interlockings at "KN" (used mainly by L.I.R.R.) and "JO" (used by both railroads) also commenced formal operation on that date, as did those inside the new Sunnyside Yard in Queens, which then was at least technically available for L.I.R.R. equipment servicing and storage (though in fact it was sparingly employed for such). Along with that, P.R.R. passengers were able to connect for Manhattan and Brooklyn through a pair of dedicated, hourly "Annex Shuttle" services (fare 30¢) that had short, 2- or 3-car M.U. consists assigned. One set was operated by the "Pennsy" from Manhattan Transfer to Penn Station and employed a small lot of six MP-54's that had been specially procured for this purpose, while another was operated by the Long Island Rail Road from Penn Station to Flatbush Ave. This was a railroad version of the Pennsylvania's former "Annex Ferry" that navigated from Exchange Place in Jersey City to Downtown Brooklyn, which was discontinued with the start of complete operations at Penn Station. Its electric M.U.'s (also nominally L.I.R.R. MP-54's) used the Glendale cutoff from the Main Line to the Rockaway Beach Division, passed through Woodhaven Junction and relayed at Ozone Park. To reach Brooklyn this shuttle then took the Woodhaven Junction connector at "WT" (formerly Tower 66), proceeded onto the Atlantic Division main line and headed west for Flatbush Avenue terminal with stops only at East New York (ex-Manhattan Beach Crossing) and Nostrand Ave. As things later sorted out in that pre-subway era, the Annex Shuttle enjoyed very little patronage on the L.I.R.R. side compared to its maritime predecessor. Not surprisingly, it was the first line from Penn Station to be discontinued on August 31, 1911, while the P.R.R. shuttle on the New Jersey side, between Penn Station and Manhattan Transfer, survived for several years longer.

Also noticeably enlarged during 1911 were several of the existing "rapid transit" stations on the Atlantic Division (Railroad Avenue, Union Course and Woodhaven)

where platforms were broadened to accommodate the strong ridership they had attracted since the 1905 electrification, particularly in rush hours. crowding between L.I.R.R. trains and Jamaica Race Track was also responsible for the addition of "LA" Tower at Locust Avenue, which oversaw the special siding and high platform used to serve its large mass of patrons, who were guided to the train station through wooden pens. Away from the electrified zone, two other new stops were added at about this time in response to the natural, long-term growth of surrounding communities. One was on the lightlyserved ex-Central Railroad of Long Island main line at Clinton Road (1911), acting as a civilian convenience stop short of the military reservation. Just as it was in 1899 this line was being used irregularly (and probably rarely, in peacetime) by special trains and/or shuttle service from Garden City, generally related to associated Army National Guard activities. A portion of the line had been modified for the Pennsylvania Railroad's a.c. Electrification Tests of 1908, which included some third rail installation as well, and over time it would regenerate in part and be expanded to serve a mixed industrial, residential and military clientele. Opened sometime in 1912, "Merrillon Avenue" was located in the new village of Garden City Park where that road converged with Nassau Boulevard as they crossed the Main Line between New Hyde Park and Mineola. Finally, with the newly-relocated depot at Floral Park complete, space became available and on June 3, 1912 connecting trackage from the (ex-C.R.R.L.I.) Hempstead Branch to the Main Line was doubled. This at last enabled a Hempstead-bound train to leave the Main Line when waiting for an opposing move off the single track branch, but the short suburban electric line and its growing ridership base would remain a source of operational folly for a few more years.

On May 15, 1911 a replacement depot building was opened on the north side of the Main Line at 178th Place for the Rockaway Junction local station. Most of the original 1890-built station on the south side had been moved slightly eastward in 1906 to provide space for a lead to the new Holban Yard, but subsequent access to the station then became slightly circuitous and was sometimes obstructed by freight activity on the yard lead. Its complete relocation did away with such difficulties, yet left the platforms and overhead bridge from the 1905 electrification to remain as they were, though enlarged. The following year (1912) Rockaway

Junction station was rechristened "Hillside," while the 1909-created Hillside station on the Main Line at Union Turnpike (now Lefferts Blvd.) was re-titled "Kew" to quickly-blossoming recognize the residential development in its area. This location then underwent a third name change in 1914 to finally become the present "Kew Gardens." Other incremental upgrades continued on the emerging commuter rail system as the end of 1911 approached, with a depot added at South Lynbrook on the Long Beach Branch in November and yet another completely new station opened on December 3 between Lawrence and Far Rockaway to serve the southwest Nassau County village of Inwood (though not directly located within it).

The improvement of additional sections of the Main Line across Queens was carried out incrementally as the establishment of Penn Station progressed, governed by the railroad's financial resources and land availabilities. As a natural result such work was prioritized to that which could be accomplished in the fastest time at the lowest cost, which in turn resulted in a somewhat haphazard sequence of implementation. completion of those elements most essential to the opening of Pennsylvania Station and Sunnyside Yard (the Glendale cut-off and Maple Grove Relocation in that order) attention was turned to upgrading of the balance of the original Main Line to accommodate both enhanced operations and the ongoing urban growth that was consuming areas abutting the railroad like a raging fire. In the spring of 1911 expansion was begun on the "Forest Hills" piece of railroad between the Glendale cut-off (Herrick Ave.) and the Maple Grove Relocation (Ascan Ave.), which at the time was laid across what remained of the once-large and private estates that had historically signified the area (some dating back to Colonial times) and were now being carved up for redevelopment. There were no grade crossings to deal with as a result and only a minimal change in "footprint" was necessary to match the sought-after increase in width. A new station house, built by the company handling nearby residential development, was placed in service at Forest Hills on August 5, 1911 while the accompanying Main Line expansion to four electrified tracks was slow to progress. As a result the new high-platform station associated with this widening project, including its now-trademark Tudor style shelters, wasn't opened until January 17, 1912 by which time the whole undertaking was virtually complete.

American Car & Foundry delivered 50 more MP-54A motors (1552-1601) and five "Combination" motors (1365-1369) to the Long Island Rail Road during the year 1911, which mainly served to support the operation of longer train consists for its continuously-growing body More important than the additional of customers. electrics, however, was arrival of the first 30 P-54A "Steam coaches" (314-343) a non-electrified version of the standard all-steel MP-54 that had been designed by the Pennsylvania for use on steam-drawn mediumdistance trains operated into the New York Terminal and elsewhere on its vast system, where they were to begin replacement of the enormous and aging array of wooden cars then still in use. These were accompanied by five PB-54 "Combination" versions of same (619-623) and five BM-62 class cars. The latter were designed solely to haul both baggage and mail, which the L.I.R.R. was carrying from both Pennsylvania Railroad connections and straight out of the new "Mail Terminal" (now the USPS' Farley Post Office) across Eighth This new facility had Avenue from Penn Station. partially opened with the Pennsy's start-up on November 27, but it would be almost three years before its construction was totally completed. L.I.R.R. received a total of 95 additional steel cars during 1911, it was also the first year in which its continuing practice of joint equipment acquisition with the parent Pennsylvania Railroad was almost divided almost evenly between the two organizations. concurrently ramped up the mass production of its own mP54 steam coaches and at the same time took delivery of 100 such units from three builders. Ongoing deliveries of the Pennsylvania's DD-1 locomotives were also finished by the midpoint of 1911, which not only relaxed the Pennsy's tenuous motive power needs at the new and already-incredibly-busy terminal, but at last cleared the way for through operation of certain Long Island Rail Road services from Penn Station to non-electrified territories in the suburbs of Nassau and Suffolk Counties.

One extremely challenging aspect of Penn Station's early success was unforeseen overcrowding in its Long Island Rail Road (Exit) Concourse and lower level Waiting Rooms, where standees were common at virtually any time of the day or night. This was a point of some contention with civil authorities for its potential drawbacks in terms of health and fire safety, and thus demanded immediate and ongoing attention. Apprised

of this problem early on, the Pennsylvania Railroad acted swiftly on behalf of its partner in early 1911 to create a new passageway from the lower level on the 33rd Street side (as then accessed via the upper level) in a southward direction, enabling it to reach two additional platforms (8 and 9) and three more tracks (15-17). This task required that a steel bridge of approximately 60 by 30 feet be extended out from that originally installed to provide alternative access to Platform 10 (Tracks 18 and 19), with new, attended gateways and stairs down to each of the platforms. This was difficult to execute from an engineering standpoint, for the off-set position of Platform 8 required that its connecting stairs be rather narrow and connected by a long walkway (illuminated by interior street lamps) to get above the cross-work of track-level switches where "JO" and "C" interlockings came together. In addition, the concourse extension was limited in reach at its southern end by a massive steel girder which supported the Baggage Room's north delivery way above. These costly capacity adjustments were complete enough to be opened to passengers by the end of May, including the usual iron fencing (as in the Main Concourse upstairs) and a continuous row of light wooden benching that stretched for about 80 feet as a supplement to the actual Waiting Room. By this time crews were also at work on a westward expansion of the original L.I.R.R. (Exit) Concourse at the Eighth Avenue end of the terminal, which would cover part of the track area as originally exposed from above, all the way to the end wall. As a result of this additional improvement, when finished in August of 1911, the iron fencing in the northwest quadrant of the Main Concourse overlooked rows of wooden benches sitting on a new travertine marble floor (and their waiting L.I.R.R. passengers) instead of open tracks and platforms. Fenced passthroughs were included in this new floor expansion to allow for the West Stairs as constructed between the Main and Exit Concourses and Platforms 7, 8 and 9 (Tracks 13-18), which made them a puzzling visual experience when viewed from a level perspective. There was also additional L.I.R.R. waiting space added off the landing of the "West" stairs that connected between the "Main" Concourse level and Platform 10, where they led to Tracks 18 and 19.

A New Era Begins-Number 4: Through Service for the East End

From the time of its earliest design (and in concept from their first days as common carriers), a major intent of both the Pennsylvania and Long Island railroads in providing Penn Station was to enable the termination of trains from any point of the compass (south, east, west and later north, too) in Manhattan itself. This was obviously its most compelling characteristic when measured against the heretofore impossible and arduous chore that the railway industry faced in physically delivering passengers between New York City and the rest of the U.S.A. But whereas the Pennsylvania was a major part of the national railway system linking farms, factories and cities that had long existed by the time Penn Station was installed, and servicing of its various elements was an inherent component of the enterprise, the Long Island Rail Road had historically grown into a more focused "terminal railroad" whose concentrations gravitated less on the creation and transport of goods than around the movement of people between beaches, small farms, administrative offices, industrial plants and various kinds of residential developments. Further, while the completion of Penn Station made the transportation capability of linking the L.I.R.R.'s numerous lines directly with Manhattan for any purpose ineradicable, the specifics of developing a practical destination array appropriate to such an undertaking was (and still remains) a perpetually unsettled, if not quite arbitrary, matter of conjecture, contention and, ultimately, performance. A look at an August 1910 forecast document reveals that the L.I.R.R. was actively planning, at least on paper, for through service to each of its East End and some of its closer-in non-electrified routes (specifically Mineola via West Hempstead, Sag Harbor, Babylon, Wading River, Oyster Bay and Greenport), but a near-term lack of available electric motive power and steel rolling stock stymied its execution for several months. This may have been fortuitous, as the terminal's attainment of immense popularity within days, if not hours, of its grand opening in late 1910 served largely to confound more than build upon its prior years of planning and preparation. As a result, both railroad companies had a far better measure of what traffic levels the facility would or would not handle with comfort by the time delivery of the Pennsylvania's DD-1 locomotives was completed the following July, almost one full year after operations at Penn Station had been initiated. So when those first several months of revenue service were reviewed and the L.I.R.R. revised its schedules accordingly (and with the needed new rolling stock also on hand by that time), the long-implicit East End service

proposal was approached more as a potential added bonus than a tacit service indulgence for its customers.

So it was that a slimmer version of the through routes projected in prior years was brought to reality, being concentrated mainly (and in all probability entirely in some instances) to weekday rush hours. In practice such trips were operated as part of regularly-scheduled service from the outer reaches of Nassau and Suffolk Counties. They generally ran express to the switches at "H" interlocking past the Honeywell St. overpass, where their steam locomotives were cut away, directed to the Long Island City engine terminal to be turned and serviced, and replaced by a waiting Pennsylvania Railroad-owned DD-1 electric before continuing through East River Tubes A or C to Penn Station. Once at the terminal, where these trains could occupy any track between 11 and 21 (but almost always used 12-16), the DD-1 locomotive was cut away from the train's consist and forwarded to the "Yard B" leads west of Ninth Avenue, there to be relayed until their next outbound assignment. For eastbound trips, the Pennsylvania's DD-1 would pass through an empty platform berth at Penn Station and double back via "IO" or "C" interlockings to hitch onto its string of coaches and/or Baggage and Express cars, perhaps with a Mail Car thrown in as well. Train consists were generally prearranged in advance and sat powerless at the platform berth between trips, with "head end" cars located on the Hudson River point in front of the coaches. Conversely, this positioned them at the rear end on the return trips to Long Island, with the passenger coaches strung out toward the front. After departing Penn Station, East End through trains passed through East River Tubes B or D and were stopped under the Honeywell St. overpass in Sunnyside, where the DD-1 electric locomotive was removed and a pre-positioned steam engine backed out of the siding beneath Harold Ave., coupled onto its train, did the required air and brake tests and resumed the journey to Long Island's easterly reaches. service began soon after all 33 "Pennsylvania Railroad" DD-1's, plus the two AA-1 prototypes, became jointlyowned and operated by the "New York Terminal Co." as an alternative to the otherwise required practice that the L.I.R.R. pay "hours" to the Pennsy for the use of its motive power. By the end of the year they had all been renumbered between 8 and 42.

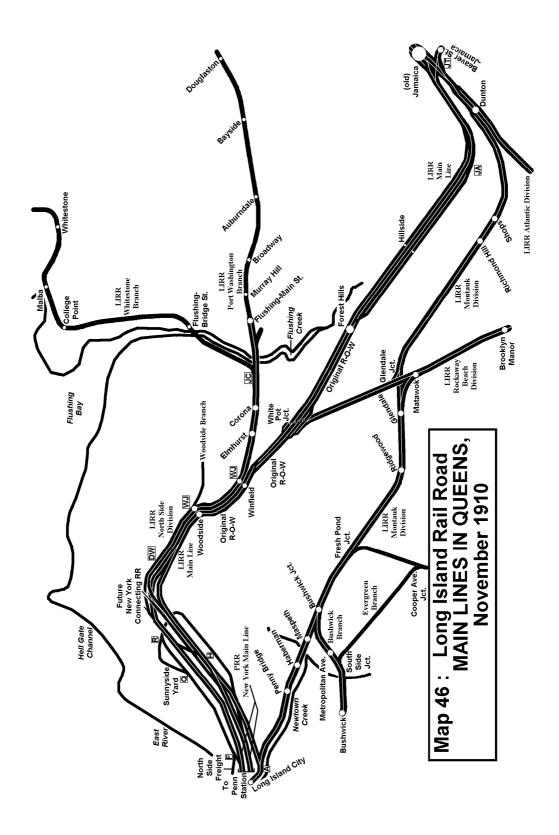
Starting on or about August 31, 1911, Long Island Rail Road through trains were operated to the following

points (excluding short-turn destinations), with distances indicated from Penn Station, New York and generic station listings:

- Oyster Bay Branch (34 miles): Penn Station to Oyster Bay via Jamaica and Mineola. Stops included Penn Station, (old) Jamaica, Queens (Village), Bellerose, Floral Park, New Hyde Park, Mineola, East Williston, Roslyn, North Roslyn, Greenvale, Glen Head, Sea Cliff, Glen Street, Glen Cove, Locust Valley, Mill Neck and Oyster Bay.
- Wading River [Port Jefferson] Branch (69 miles): Penn Station to Wading River via Jamaica, Mineola and Hicksville. Stops included Penn Station, (old) Jamaica, Mineola, Hicksville, Syosset, Cold Spring Harbor, Huntington, Greenlawn, Northport, Kings Park, Smithtown, St. James, Flowerfield, Stony Brook, Setauket, Port Jefferson, Miller Place, Rocky Point, Shoreham and Wading River.
- Main Line (95 miles): Penn Station to Jamaica, Mineola Greenport via Hicksville. Stops included Penn Station, (old) Jamaica, Mineola, Hicksville, Central Park, Farmingdale, Wyandanch, Edgewood, Deer Park, Brentwood, Central Islip, Ronkonkoma, Holbrook, Holtsville, Medford, Bellport, Yaphank, Manorville, Calverton, Riverhead, Aquebogue, Jamesport, Laurel, Mattituck, Cutchogue, Peconic, Southold and Greenport.
- Babylon Branch (37 miles): Penn Station to Babylon via via Jamaica, Valley Stream and Lynbrook. Stops included Penn Station, (old)

- Jamaica, Locust Avenue, Springfield, Rosedale, Clear Stream Rd., Valley Stream, Lynbrook, Rockville Centre, Baldwin, Freeport, Merrick, Bellmore, Wantagh, Seaford, Massapequa, Amityville, Copiague, Lindenhurst and Babylon.
- Montauk Branch (72 miles): Penn Station to Speonk via Jamaica, Valley Stream, Lynbrook and Babylon. Stops included Penn Station, (old) Jamaica, Valley Stream, Lynbrook, Babylon, Bayshore, Islip, Great River, Oakdale, Sayville, Bayport, Bluepoint, Patchogue, Hagerman, Bellport, Brookhaven, Mastic, Center Moriches, East Moriches, Eastport and Speonk.

Once some beneficial operational experience was gained, the L.I.R.R.'s East End through trains to Penn Station remained a regular aspect of its operations for several decades, being expanded by the end of that first year to include various beach specials and other dedicated trains, most notably its premium Cannonball, the exclusive summer weekend runs between New York, the Hamptons and Montauk. Contrasting the establishment of through East End service in 1911 was elimination of the dedicated M.U. shuttle service between Penn Station and Jamaica to support outward connections. As time progressed its role had gradually been subsumed by the plethora of scheduled services through both the Beaver Street and "old" Jamaica platforms, any of which passengers could use to perform that time-honored tradition of the Long Island Rail Road—"Change at Jamaica"—to get where they needed to go.



-VALLEY STREAM via Mineola (West Hempstead) -MINEOLA via Vallev Stream (West Hempstead) -CENTER MORICHES -PATCHOGUE -GREENPORT -RIVERHEAD -EASTPORT -PORT WASHINGTON via Great Neck -HEMPSTEAD via Garden City -BABYLON -MONTAUK -FAR ROCKAWAY via Valley Stream ROCKAWAY PARK via Woodhaven -SPEONK **FAR ROCKAWAY** via Woodhaven GREENPORT -Bridgehampton & Sag Harbor -Eastport & Manorville ONG ISLAND CITY (Steam) -HEMPSTEAD via Mineola -WHITESTONE LANDING -MANHATTAN BEACH **-PORT JEFFERSON** Steam Shuttles WADING RIVER RONKONKOMA HUNTINGTON -WYANDANCH **-OYSTER BAY** -NORTHPORT -HICKSVILLE PENN STATION SERVICES Map 47: Long Island Rail Road WADING RIVER September 1911 **New York Terminals** Central Branch (& Bethpage Branch) -FAR ROCKAWAY via Woodhaven -FAR ROCKAWAY via Valley Stream ROCKAWAY PARK via Woodhaven QUEENS (Village) Rapid Transit BELMONT PARK (Suspended) HEMPSTEAD via Garden City FLATBUSH AVE. (Electric) SUFFOLK Freight Only Service -Creedmoor Branch -Bay Ridge Branch BABYLON PENN STATION (Limited Thru Service OYSTER -FAR ROCKAWAY via Woodhaven -FAR ROCKAWAY via Valley Stream ROCKAWAY PARK via Woodhaven arden City MPSTEAD NASSAU -BABYLON via Rockville Center -WADING RIVER via Hicksville -HEMPSTEAD via Garden City -LONG BEACH via Lynbrook -GREENPORT via Riverhead PENN STATION (Electric) **-OYSTER BAY via Mineola** SPEONK via Patchogue