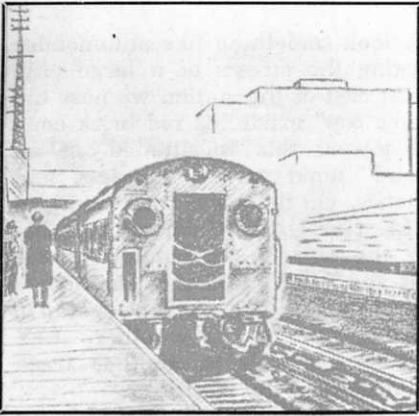
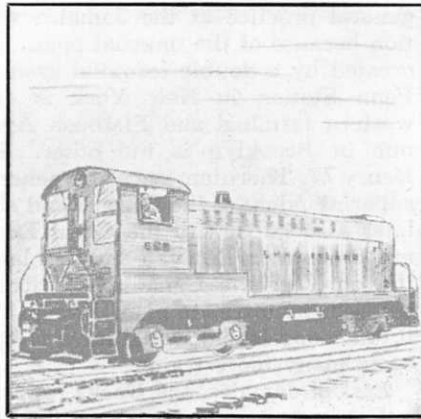


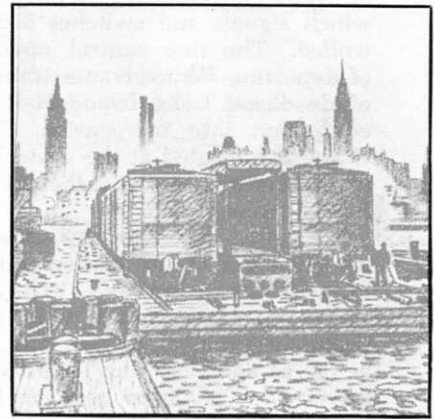
Morris Park engine terminal.



Electric.



Diesel.



Car Float.

Long Island Rail Road

One out of every five U. S. rail commuters rides on the Long Island, the only class 1 railroad whose passenger revenues exceed the income derived from freight

BY RAE EDIGER

FROM winding underground tunnels thousands of homebound workers come streaming into New York's Pennsylvania Station along about 6 in the evening, like so many moles from their runways. They come from subterranean railroad trains — the Interborough Rapid Transit, the Broadway Manhattan Transit, and the Independent — which erupt with loads of weary executives and secretaries, Fifth Avenue shop sales girls, Wall Street brokers. In one of the world's busiest railroad stations they make a dash, sometimes a near stampede, for Long Island Rail Road* trains.

That is what makes the Long Island the world's greatest commuter railroad. One out of every five rail commuters in the United States goes by Long Island. The line connects New York with a prosperous residential and playground island 120 miles long and up to 20 miles wide.

The station, shared by the Long Island and its daddy, the mighty Pennsylvania, is a city in itself. We crash through the human lines to buy

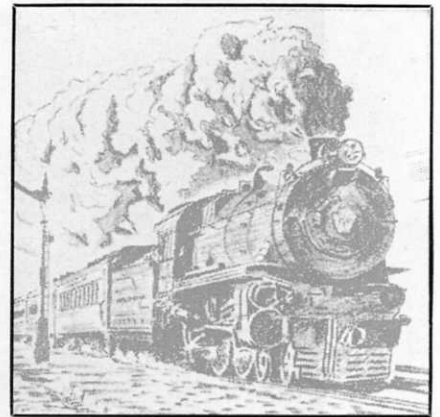
* The Long Island still retains the archaic two-word spelling of "Rail Road." In this it is unique.

a late *World-Telegram* or *Sun* at a newsstand, push on to a bakery to take home an apple crumb cake, then rush to the train gates.

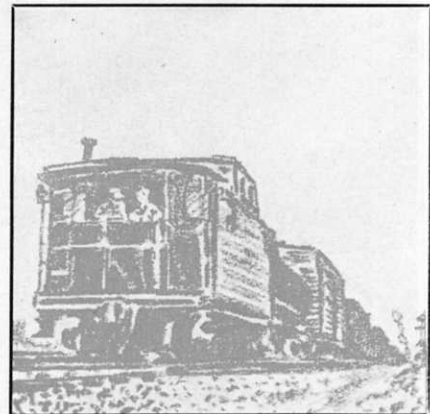
We enter between tracks 13 and 14 where a sign says "Long Beach." No one stops us although a sign states that tickets are needed to enter. There are swarms of people on the platform and trains on both tracks. If we boarded the one on Track 13 we might wind up in Chicago. It is Pennsylvania's *Broadway Limited*. But there is not much chance for such error; white-clad Pullman porters guard each door. Our multiple-unit Long Island train to Long Beach is on Track 14. It is Tuscan red, the same as its big brother across the platform though not as shiny. Our train has 12 cars in this rush period. This is the limit for the Long Island, which is rationed on space in the East River tunnels, the dividing line between roaring Manhattan and suburban Long Island.

The platform on which we stand is but one from a 4-mile battery of enclosed passenger tracks at Penn Station. There are 21 tracks, over which 100.5 million passengers arrived and departed in 1947. Of these, 68.1 million rode the Long Island Rail Road.

At the westerly end of our platform



Steam.



Way Freight.

are towers A and KN. These are two of four interlocking towers from which signals and switches are controlled. The two control operations of departing Pennsylvania trains and of deadhead Long Island Rail Road equipment into the station. Towers C and JO, located at the easterly end of the station, guide outbound Long Island trains.

We leave our windows closed as we glide out of the station until the tunnels are cleared—otherwise strong currents would whip in. A trainman rapidly punches our ticket as far as Jamaica. The ticket is good for 60 one-way trips between Pennsylvania Station and Long Beach, 25 miles, during one month.

We stop briefly at Woodside, Forest Hills and Kew Gardens. In 20 minutes we reach Jamaica, a jumbo clearing house for LIRR trains. Trainmen call out, "This train for West Hempstead, change for Long Beach." We step onto the platform, and on the next track our train is waiting. It has come in from Brooklyn.

Passengers for Long Beach climb in; those for West Hempstead make the reverse change. In two minutes

the trains are off and the loudspeaker announces the arrival of the next two trains.

Crisscrossing of passengers is the general practice at the Jamaica station because of the unusual operation created by a double terminal system. Penn Station in New York is one western terminal and Flatbush Avenue in Brooklyn is the other. Sir Henry W. Thornton, once the general superintendent of the Long Island and later associated with the Great Eastern Railway in England and still later the chief of the Canadian National, devised the intricate plan. Except for it, the Long Island would have to operate many more trains.

East of Jamaica, the tracks fork off onto a network of branches, for the railroad is an integral of 39 independent units.

Leaving Jamaica we get a quick through-the-window glimpse of the labyrinth of tracks and trains. The 14 main tracks are jammed with trains. Most of them are electric, but steam locomotives still ply four branches. About 650 passenger units pass through Jamaica station daily and in the morning and evening rush hours

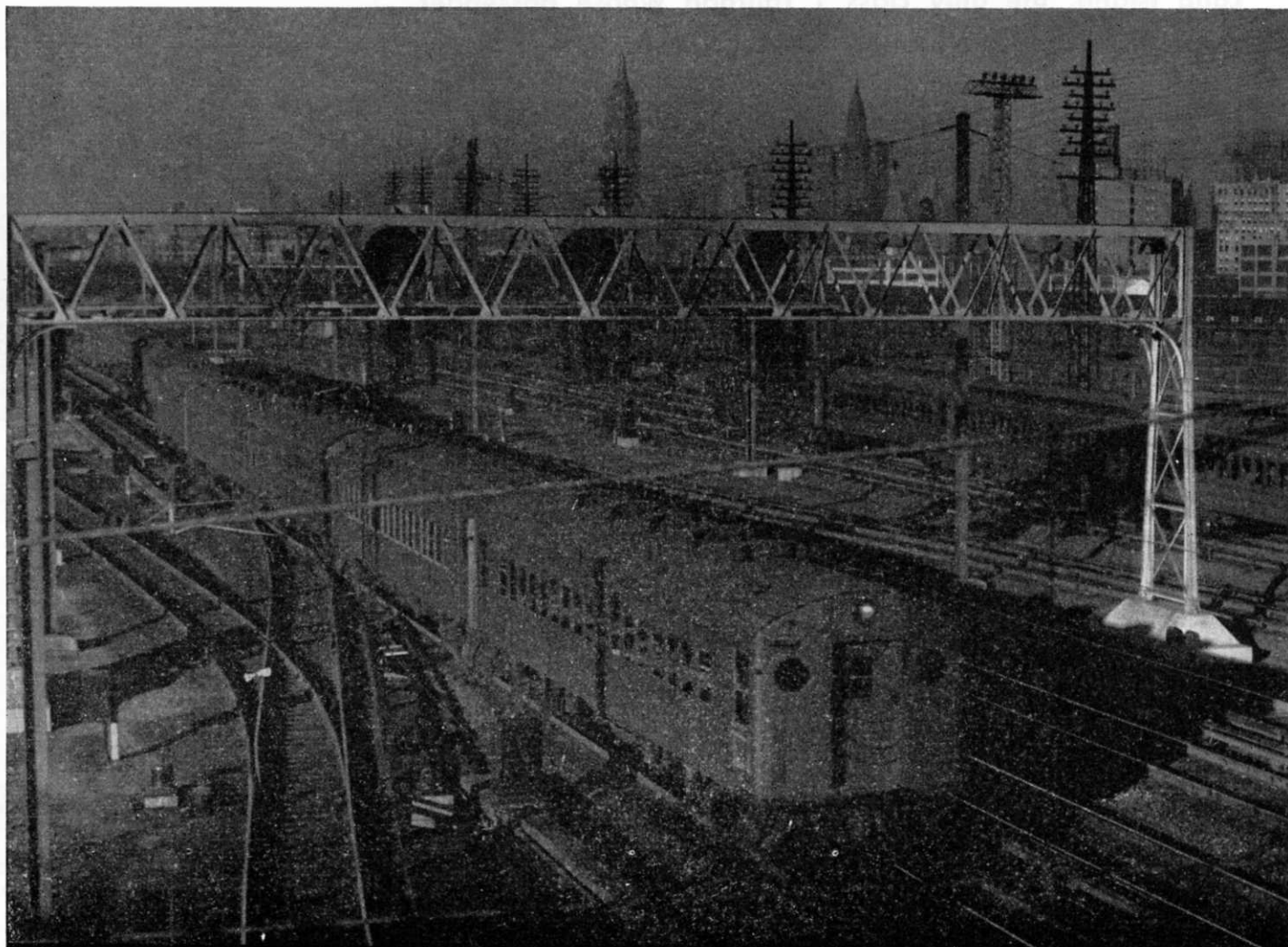
they look something like automobiles clogging the streets of a large city.

Just east of the station we pass the "traffic cop" inside his red brick control tower; this is situated on an "island" amid waves of tracks and switches. On the tower wall the name HALL (for Union Hall) appears inside the octagon trademark of the PRR and LIRR. HALL is one of two control towers that watch over 170 Jamaica switches. The other, JAY (for Jamaica), is in another track island west of the platforms.

On a window ledge of HALL we see a signal board bearing the designation "0." On winter days it might show a "3," which would authorize three-point heat on the trains.

The towerman has beside him large panels bearing a replica of the track network. Red lights flash across it to show him the exact location of the passing trains. He throws the air switches easily and accurately by moving the small levers before him. Loudspeakers connecting the tower with the dispatcher's office make for thorough coordination.

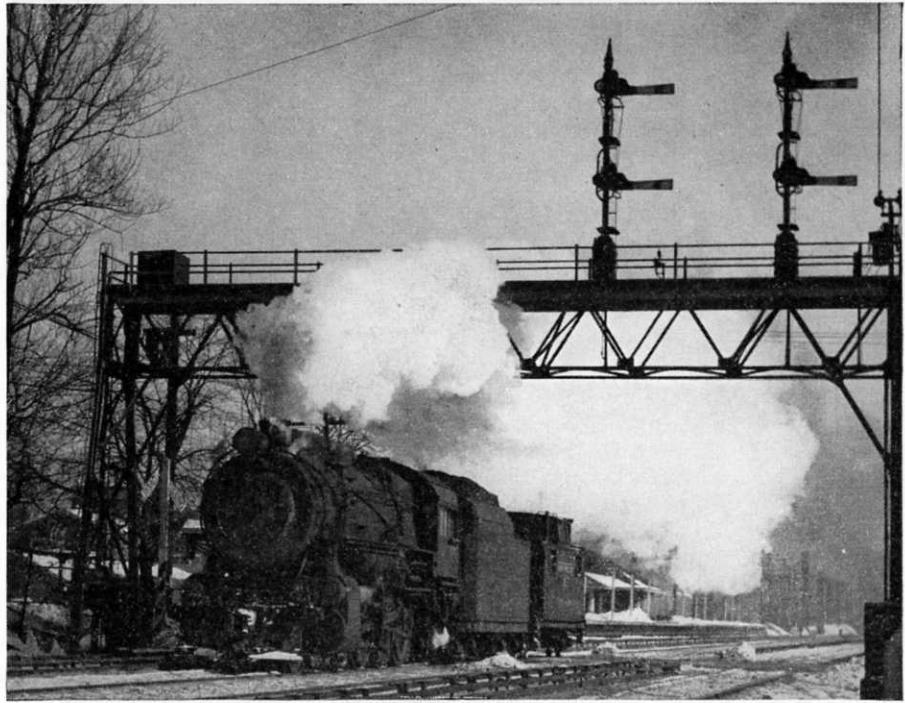
Outside Jamaica, a trainman makes a quick, accurate stab at our ticket



with his punch. We make snappy stops at Valley Stream, Lynbrook, Center Avenue, East Rockaway, Atlantic Avenue, Oceanside, Island Park, and then Long Beach. The trip from Penn Station has taken 52 minutes. Such is commuting on the Long Island Rail Road.

In the morning you do it in reverse. Again the rush, again the quick change at Jamaica unless you happen to be on a through train. You spend your time on the train reading or sleeping or thinking, or playing bridge or gin rummy, or just plain relaxing. But you can't save seats for your bridge partners during the rush; it's first come, first seated.

University students with books and collegiate chatter mingle with commuting workers on the morning trains. On later rides women are in the majority; most of them are city-bound shoppers. The coaches are clean, plain, and devoid of luxury except for certain late models. Most of the seats are straw-upholstered. There is a certain informality on these trains. You learn to know the trainmen and they pause to talk with you. If you get on the wrong train, which the best



Harry J. Trede.

A capacity load of New York-bound commuters hurries through Sunnyside Yard on the outside iron while in the foreground an 11-car train rolls back after discharging its crowd in PRR Station. On a wintry day in Floral Park, a LIRR H10s 2-8-0, No. 112, shuffles by on a caboose hop.



commuter will do occasionally in a lifetime of riding on the rails, the trip doesn't cost you a dime. Trainmen generally try to be helpful. One of their biggest jobs on the late night trains is to awaken sleepers, including drunks, at Jamaica and at destination points.

The Long Beach route, along the south shore, is only one cog in the extensive rail network covering Long Island. The railroad operates 813 regular passenger trains daily in summer and 746 in winter over 378 miles of right of way. Steam locomotives run to Oyster Bay and Port Jefferson on the north shore, and to Greenport and Montauk on the island's eastern extremities. They range from 0-6-0 switchers built in 1902 to heavier Ten-Wheelers of 1930 vintage. Most are cast in the PRR mold, with high headlights and Belpaire fireboxes.

Other routes operate by third rail. LIRR's crack train, the *Cannon Ball*, operates to Montauk, the most distant terminal, in 2 hours 55 minutes. The *Cannon Ball* goes beyond the commuter region into farming and playground areas; it carries parlor cars in the summer and transports New Yorkers to a romantic island beauty spot where ocean waves are rough and the fish are big. Eventually this Montauk Branch will be exclusively diesel.

THERE were 67.5 million Long Island Rail Road commuting passen-

gers in 1946, according to I. C. C. figures. The Illinois Central came in second with 47 million commuters, while Pennsy itself took 37.8 million home and back. Altogether, the nation's carriers hauled 340.6 million commuters.

In total passengers carried, the Long Island was outstripped only by the Pennsylvania. Of the 792.7 million passengers carried, 133.7 took the Pennsy, 115.8 the Long Island, 69.2 the New York Central, and 54.1 the Illinois Central.

On the other hand, the Long Island carries little freight traffic. It is the nation's only class 1 railroad whose passenger income exceeds its freight revenues. In 1941, a typical year, Long Island passenger traffic turned in \$16.5 million in revenues; freight revenues were \$8.9 million by contrast. Compare this with the neighboring Erie, whose passenger business in the same year totaled up to \$4.7 million while freight revenues were up to \$95.7 million.

Today the LIRR, North America's third oldest railroad (it was chartered in 1834), is sparked by a note of youthful optimism. Despite a steady string of deficits, the road is in the midst of a vigorous \$17.6 million improvement program.

New officers, young men with young ideas and appointed effective March 1, 1948, immediately delved into the betterment campaign, which is to stretch over three years. David E.



Harry J. Trede.

No. 36, one of the Long Island's heavy, Juniata-built 4-6-0's, settles into her stride as she moves eastbound near Carle Place with eight cars of commuters in tow. One of the heaviest Ten-Wheelers in the world and certainly the most advanced in design in the United States, this G5s is no hand-me-down. It was specifically designed for these rapid-acceleration commuter runs.

Smucker, 40, with much experience on the parent PRR, was given entire supervision over Long Island operations. Henry A. Weiss, 38, became traffic manager and now reports directly to Smucker in an unusual set-up designed for concentrated effort.

Among the improvements is the acquisition of 50 double-deck coaches, a type not used by any other railroad. These cars, designed to reduce the number of standees by simply stacking 'em up, are being built in the Pennsylvania's 218-acre Altoona Shops. Three experimental cars of this type were placed in service in 1932. Finally 10 more were ordered but the war interrupted delivery. They arrived two years ago. The additional 50 will cost \$7.1 million or \$143,000 per coach. The Long Island is receiving inquiries from other roads about these "upstairs" cars. Its answer is that "the passengers like them fine."

Commuters need not climb stairways in these cars as they do in two-story buses. One step up and you're on top. There is only one floor in this novel seating arrangement which is designed to save space.

These coaches, low enough to meet tunnel clearances, are 14½ feet 1½ inches high, or only 7½ inches higher than standard equipment. The difference is that the empty top-half of the usual coach has been filled with seats as well as the usual lower-half. Instead of seating 72, as in ordinary LIRR equipment, these double-deckers seat 132 each. They are just under 81 feet long and weigh (at 115,000 pounds apiece) only 4300 pounds more than the standard steel car. They feature air conditioning, innerspring seat cushions, recessed lighting, and car-to-car public address systems.

Incidentally, Long Island was the first railroad to employ 100 per cent steel passenger equipment. It retired its last wooden car in 1927.

THE LONG ISLAND is also pioneering in the use of micro-wave beams for controlling substations, switches and signals. Four-foot saucer-like parabolic reflectors have been installed atop the Jamaica station and two others on a 60-foot pole over the right of way at Floral Park, 6 miles away. If the experiment works, switches will be "hypnotized" into place by a powerful beam eye.

General Manager Smucker explains, "For the first time on any railroad we have installed apparatus which employs a pencil-like beam of radio energy for multiple communication and control purposes." He states that first reports on the experiment have been "entirely satisfactory."

The system employs frequency modulation on waves of frequencies

near those used in radar. Sperry Gyroscope and Union Switch & Signal Company engineers assisted in the installation. The two reflectors at Jamaica handle signals for transmitting and receiving sets, together with associated devices, in a small structure on the roof of the station building. These sets are connected in turn with control and communication devices in the offices of the third-floor power director. From control panels there, switches in Floral Park are worked. A panel light flashes to show "mission completed."

The beam system first was considered by the Long Island to help operate new power distributing substations. Four new substations, costing \$1.1 million, have gone into operation to speed trains and give better lighting in coaches. Nine more are on order and four present substations are scheduled for improvement at a cost of \$3.8 million.

Also in connection with the improvement program, many existing passenger cars have been equipped with circulating fans, metal window sashes, safety glass, centralized door controls, better springs, new insulation, and new seat coverings.

Crushed stone has replaced cinder ballast on 16 miles of track for a cleaner, steadier ride. This has cost the LIRR \$199,690 thus far and will run to \$2.1 million. Remaining to be ballasted are 155 miles of track. Ties are being replaced and 110-pound rails are being supplanted by 115-pound rails.

Some new passenger stations have been built, more are under construction, and others are being modernized and improved at a cost of \$145,342. More new stations will be built and others rebuilt at a cost of \$529,658. There are now 175 terminals in addition to the main ones in New York, Brooklyn, and Jamaica.

LONG ISLAND has 29 diesel locomotives of 660 and 1000 horsepower on order and 23 similar machines are now on the roster. They are used in

switching and freight service. Purchase of these diesels is in line with a \$1 million program by New York City to combat smoke in the city limits, which includes Brooklyn and Queens. History appears to be repeating itself. In the LIRR's pioneer days Suffolk County farmers rebelled at the smoke and noise of the locomotives, and now modern New York City objects to the smoke. And when the first smokeless 1000-horsepower diesels began operation recently there were some complaints that they were too noisy.

Equipment purchases last summer also included additional snow-fighting machines. The road plans to experiment with and develop steam jet engines and other devices for clearing third rails. It will also hire an engineering service to help develop means of keeping the third rail free of snow and ice.

This action follows costly experience gained during the blizzard of December, 1947, one of the worst in New York's history. The storm temporarily paralyzed service and required expenditure of approximately \$640,000 for removal of snow and ice, including repairs. Some commuters were stranded for long periods aboard trains. Lawsuits resulted.

The blizzard and its consequences brought the Long Island Rail Road's popularity with its public to its lowest point, perhaps, since its locomotives frightened Suffolk horses in the early days. Saying unkind things about the Long Island became a fad on the island, like making faces behind the back of an unpopular teacher. Newspapers and the radio took up the echo. On the heels of the blizzard debacle, such things as late trains and slight discomforts were magnified

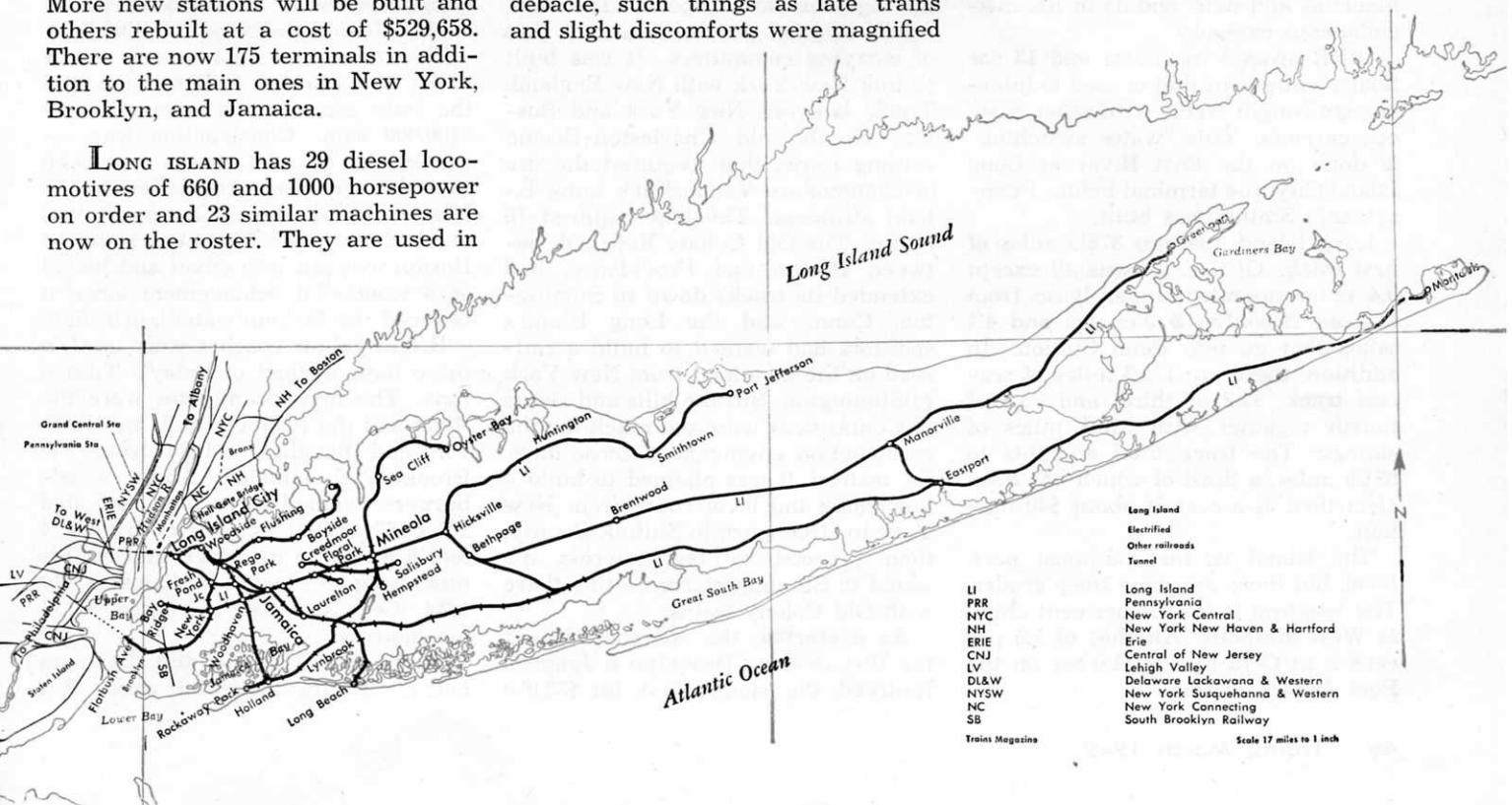
in importance. And all this after commutation fares had been raised. A New York newspaper even printed a satiric item on its first page saying bookmakers were accepting bets on how late the Long Island iron horse would be.

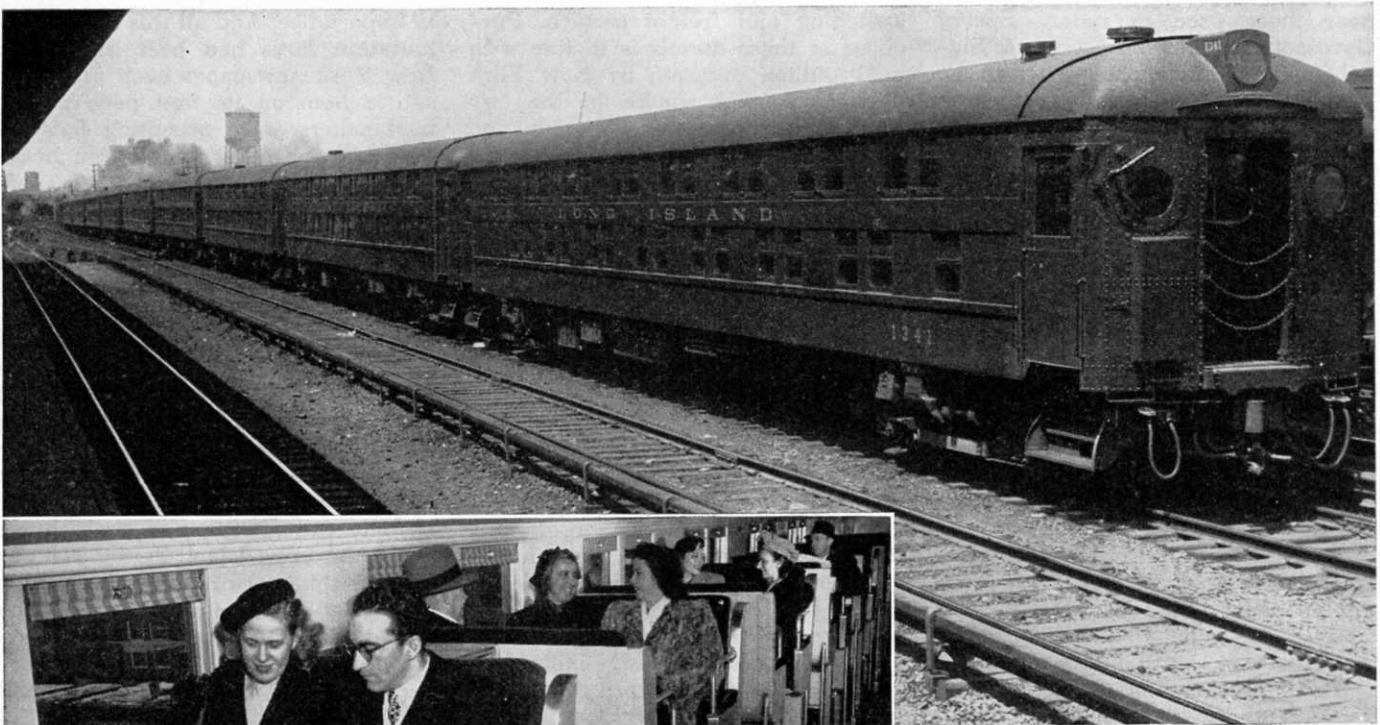
With amazing speed the public opinion trend was reversed. Within a few months the railroad ceased to be the butt of ridicule. Activity in the publicity department, an improvement that came about the same time as the better equipment, turned the trick. Publicity Representative David R. George and his assistants, Phyllis Towne and Mildred Mashek, got busy telling the public a few things about the railroad. Press and radio were used to call attention to such things about the Long Island as the 99.6 per cent on-time performance of its trains and what was being done with the money resulting from the fare increases.

As 1948 began, Long Island had equipment with a valuation of \$37.3 million, representing a \$972,000 increase over the previous year. The total of 173 steam, electric, and diesel locomotives will grow with the arrival of more diesels.

Passenger equipment totals 1317 units, not including the 1948 additions. There are 669 multiple-unit coaches seating 49,702 persons, plus 265 others seating 19,600. There are also 124 baggage, express and mail cars plus 257 trailers. Two club cars are used on the *Cannon Ball*.

Freight equipment, which is steel and steel underframe, consists of 76 50-ton capacity gondolas and 36 cabooses. Work equipment is varied, includes 8 camp cars, 11 tool and





On a railroad as heavily trafficked as the Long Island, the number of trains to handle a given flow of passengers is a matter of vast concern, hence LIRR's enthusiastic development of the ultra-efficient double-deck coach. Inside these 132-passenger cars you have your choice of stepping up or down; parent-Pennsylvania's shops builds them.

block, 13 supply, 13 derricks, 67 MofW gondolas and flats, and 35 in the miscellaneous category.

LIRR owns 7 tug boats and 13 car floats, equipment that is used to interchange freight traffic with other eastern carriers. This "water switching" is done on the East River at Long Island City, the terminal before Pennsylvania Station was built.

Long Island operates 378½ miles of first track. Of this, it owns all except 9.4 miles operated under lease from the old Brooklyn & Jamaica and 4.1 miles that go into Penn Station. In addition, there are 175.3 miles of second track, 33.2 of third, and 26.8 of fourth together with 318.1 miles of sidings. The track total amounts to 931.9 miles, a third of which has been electrified at a cost of about \$40 million.

The island is, for the most part, level, but there are some steep grades. The toughest is the 1.7 per cent climb at West Mespeth. Another of 1.5 per cent is at Cold Spring Harbor on the Port Jefferson line.

THE railroad and the island grew up together, so to speak. The railroad's original purpose was not that of carrying commuters. It was built to link New York with New England. Traffic between New York and Boston, on the old Charleston-Boston trading route, then required the use of Commodore Vanderbilt's Long Island steamers. The trip required 16 hours. The Old Colony Railroad, between Boston and Providence, had extended its tracks down to Stonington, Conn., and the Long Island's sponsors had wanted to build a railroad on the mainland from New York to Stonington. But the hills and rivers of Connecticut were too much for the construction engineers of those days. So, instead, it was planned to build a line along the level route from New York to Greenport, in Suffolk County, then proceed by ferry across the sound to Stonington, connecting there with Old Colony trains.

As a starter, the company leased the 10-mile-long Brooklyn & Jamaica Railroad, the island's first, for \$33,000

annually. Then it began construction of the 85-mile line from Jamaica to Greenport in 1835.

The beginning was modest. The railroad operated two trains each way daily, and picked up passengers at crossroads for additional revenue. The tracks had been extended as far as Hicksville, a distance of 17 miles.

The company then nearly went under, a victim of a depression, but the state came to the rescue with a \$100,000 loan. Construction was resumed and by 1841 tracks had been extended to Farmingdale at the Nassau-Suffolk line. Greenport was reached in 1844. The new route to Boston was put into effect and hailed as a wonderful achievement since it reduced the 16-hour water trip by half.

Bright yellow coaches were used in those days instead of today's Tuscan reds. The first locomotives were the *Ariel* and the *Postboy*, built by Baldwin and bought in 1834 from the Brooklyn & Jamaica. These wood-burners weighed seven tons each, had 10" x 16" cylinders, single drivers 4 feet 6 inches in diameter, and boilers measuring 38½ inches in diameter. By 1844 the roster had increased to 11 locomotives.

Traffic increased too, and the Long Island's future appeared rosy. But

trouble was in store. Farmers in Suffolk County had become bitter because their fields and forests were set afire by sparks from the locomotives' "chimneys." They complained, too, that the clatter of wheels, puffing of steam and shrieking of whistles frightened their horses and stock. The smoke, they said, sprinkled wash with cinders. Besides, Sunday trains desecrated the Sabbath.

James Fenimore Cooper, who lived at Sag Harbor, wrote disparagingly about the "fiery trains that draft after them a sort of bastard elegance."

So the farmers pulled spikes, tore up tracks, burned stations. The Long Island stopped Sunday trains but a measure of truce was not reached until officials of the road went to Suffolk and personally awarded cash damage to the claimants.

More woes were ahead. A new group of railroad backers succeeded in overcoming the geographical difficulties of Connecticut and the tide of traffic was switched. By 1850 the Long Island had been forced into receivership.

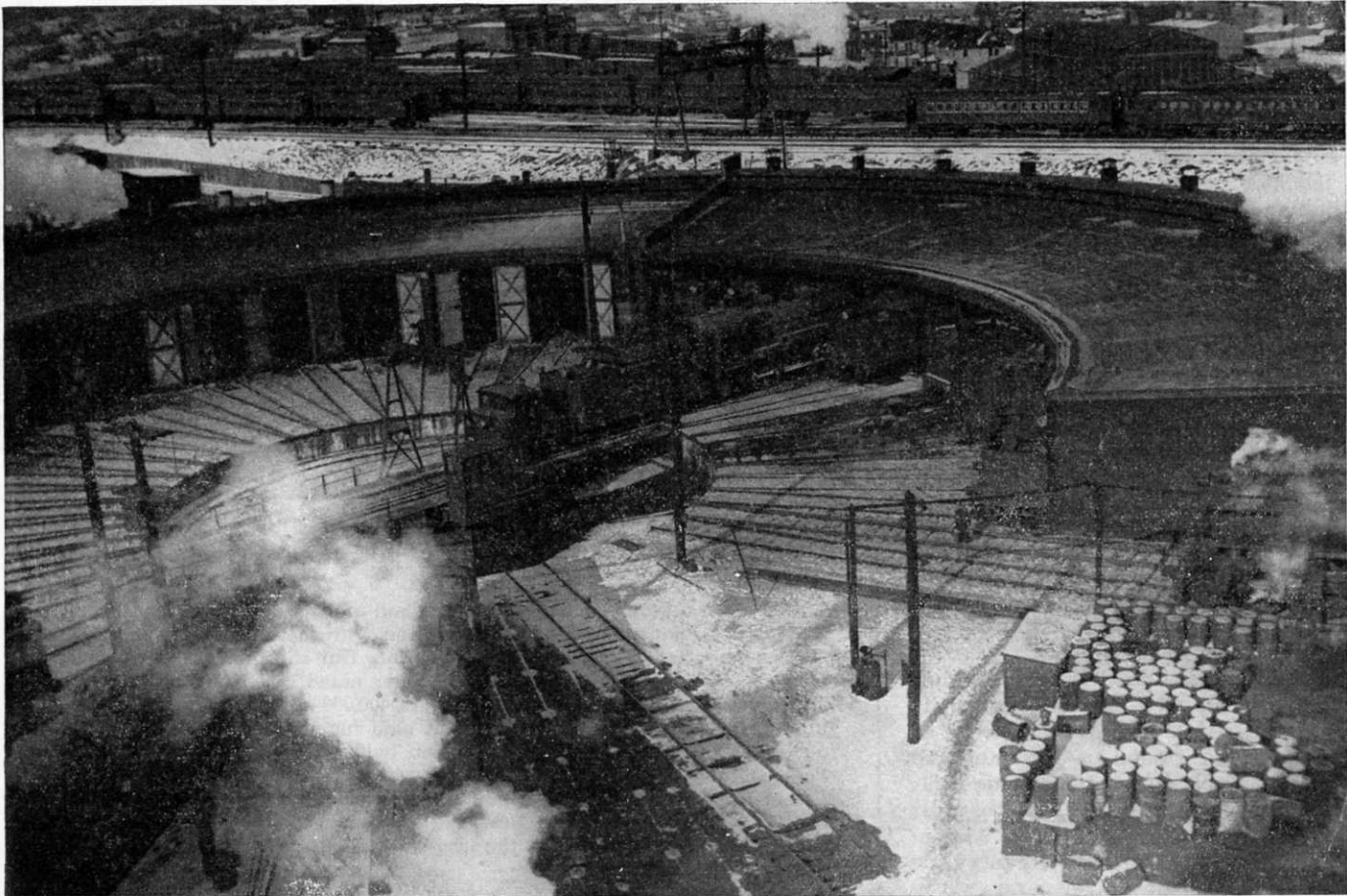
In 1865 the railroad was on its way to prosperity again. In that year Oliver Charlick, a railroad builder, obtained control of the Long Island by unobtrusively buying up a major portion of its stock. Charlick propounded policies of no new construc-

Locomotives of the Long Island

Class	Type	No. of Locomotives	Service	Notes
Steam:				
E6s	4-4-2	4	Passenger	Leased from PRR
G53sd	4-6-0	3	Passenger	
G5s	4-6-0	31	Passenger	
K4s	4-6-2	13	Passenger	Leased from PRR
B8	0-6-0	2	Yard	Leased from PRR
C51s	0-8-0	2	Yard	
C51sa	0-8-0	11	Yard	
H6sb	2-8-0	4	Freight	
H10s	2-8-0	19	Freight	
Electric:				
A1	0-4-0	2	Shop	
B3	0-6-0	14	Yard	
DD1	4-4-4-4	42	Road	2-unit
Oil-electric:				
AA2	0-4-4-0	1	Yard	
AA3	0-4-4-0	1	Yard	
Diesel:*				
B6S	660 h.p.	1	Yard	Baldwin
AS6	660 h.p.	5	Yard	Alco-GE
BS6A	660 h.p.	4	Yard	Baldwin
BS10A	1000 h.p.	1	Road-switcher	Baldwin
AS10	1000 h.p.	10	Road-switcher	Alco-GE
AS10A	1000 h.p.	2	Road-switcher	Alco-GE

*23 more diesels are on order for 1949 delivery.

A Long Island midget 25-ton electric shop engine hauls a dead Consolidation onto the turntable at Long Island's Morris Park roundhouse. Other steam power lies in the house for routine repairs or stands outside in full steam. In the early 1900's the Long Island roster included handsome, high-driven Camelbacks of 4-4-2 and 4-6-0 wheel arrangements. But LIRR individuality was lost as the Pennsy assigned the road its own power or built new locomotives for it.



How the commuters ride

(Based on 1946 figures)

Long Island -----	67,501,730
Illinois Central -----	47,095,463
Pennsylvania -----	37,808,947
New York Central -----	37,615,796
New Haven -----	29,340,383
Chicago & North Western -----	18,364,513
Lackawanna -----	16,912,945
Boston & Maine -----	13,134,942
Jersey Central -----	12,649,246
Reading -----	10,133,425
GRAND TOTAL	
(All railroads) -----	340,670,292

tion, no improvements in service, and more profits. As a result, 30 local railroads were organized during the period of his control and by 1875 two systems, the North Side and the South Side, were in competition with the LIRR. By this time the Long Island had built, in addition to its main line that now extended from Long Island City in Queens to Greenport, several branches including one from Jamaica to Far Rockaway, a Queens Beach resort.

The intensive competition introduced rate wars that brought all three systems near failure. The Havermeyer and Poppenhausen interests got control of first the Long Island and then the North and South Side systems, but high local road leases brought about a receivership.

At this point, Austin Corbin, a financier, bought the combined Long Island systems with money from Boston and London, and proceeded to improve them and replace equipment until the Long Island again became a leading railroad. During the period of Corbin's control, from 1880 until his death in 1896, the Long Island paid dividends.

THE life of the road entered a new phase in 1900 when the Pennsylvania Railroad, under President Alexander J. Cassatt, obtained a majority of the LIRR's stock.

Work of electrifying the western portion of the Long Island Rail Road began in 1904. Six electrified sections were successively opened for service in 1905 and 1906.

The \$110 million Pennsylvania Station was opened in 1910, after six years of construction. Along with it, Long Island gained use of four East River tunnels, built at the same time, and commuters no longer had to cross by ferry at Long Island City. Also in the program were the Sunnyside Yards, largest passenger car yards in

the world. It services both Pennsylvania and Long Island equipment.

The tunnels were built by the shield method — driving an iron tube 23 feet in diameter below the river's surface. These borings started from each side of the river and joined.

The gray stone Penn Station presents an outward appearance of dignity and serenity that belies the hustle and bustle inside. It occupies 28 lively acres between Seventh and Eighth avenues and 31st and 33rd streets. LIRR occupies the street floor, PRR the next, and offices above.

Many a novice gets lost in the huge building, unable to find a way to the street. Still, with guiding signs abounding, the thing is really simple. If in doubt, you can ask information clerks in the center of the halls, or members of the station's own police force. A "prisoner" in Pennsylvania Station would not need to suffer, anyway. In the building there are restaurants, lunch counters, bars, women's clothing stores, barber shops, drug stores, flower shops, fruit and candy stores, bakeries, jewelers, tailors, liquor stores, a bank, a hospital, and a Y. M. C. A.

There are 20 Long Island ticket windows and business is usually brisk there. Most commuters prefer to mill

around rather than be seated in the waiting room. At the train gates, though, the rush is not nearly so violent as at New York subway stations, where pushing and toe-trodding are commonplace.

LIRR, which operates 340 of the approximately 580 trains entering and leaving Penn Station every 24 hours, pays about \$1.7 million annually for its use of the giant terminal. But the Long Island receives all rentals from the stores, restaurants and newsstands in the Long Island section of the station, and these rentals amounted to \$843,744 in 1947. (The concession establishments, incidentally, were built at no expense whatsoever to the Long Island.) Thus Long Island paid a net rental of only \$861,262 in 1947. In previous years the rental had run as high as roughly \$3 million per year, giving rise to the rumor that PRR was bleeding LIRR in rent.

When the Pennsylvania took control in 1900, the Long Island had a deficit of over \$800,000. This increased until by 1911 the deficit was over \$3.3 million. From 1934 to date there has been an unbroken series of annual deficits except during the war years.

At the same time, under PRR control the Long Island's property and equipment value has jumped from \$28.2 million in 1900 to more than \$150 million today.

LIRR passengers reached a 1929 peak of 188.8 million. Of that total it was estimated that at least 83 million were commuters. Then came the depression and competition from other carriers. And the Long Island went deeper into the red.

The principal causes of the drop of 50 million passengers yearly between 1929 and 1940 were the subway expansion from New York into Queens borough and bus competition in Queens, Nassau and parts of Suffolk. Many passengers who once commuted by Long Island began taking trains of the New York City rapid transit system, a subsidized setup, and feeder buses took commuters from Nassau and Suffolk to the subways. In 1921

Does the LIRR pay too much for Pennsylvania Station?

A favorite attack against the Long Island and its deficits is the argument that parent-Pennsylvania saddles the road with more than its share of the cost of operating into Pennsylvania Station. But the facts do not bear this out, as General Manager David E. Smucker noted recently, stating that the Long Island section of the station covers 400,000 square feet, excluding the tunnel area. But the total annual rent paid for station and tunnels figures out to \$4.26 per square foot — less than half what other businesses in the Penn Station area pay. Other pertinent facts: LIRR pays rental for only two of the East River tunnels but uses all four during rush hours; its lease has I. C. C. approval and a New York Public Service Commission expert agrees that "the lease is not unreasonable to the Long Island Rail Road."

there were two bus lines on Long Island carrying an estimated 235,400 passengers a year. Twenty years later the five bus lines competing most directly with the Long Island carried 59 million passengers.

THEN came the war years and the railroad showed a profit. War-swollen traffic resulted largely from restrictions on other forms of transportation.

After the war, red ink came in again. In 1947 the road had a record deficit of \$4.9 million, despite increases of 20 per cent in commutation fares. Five per cent further fare increases were granted last year.

But the LIRR has confidence in the island's future. Assessed property values on Long Island are nearly \$7.5 million, many times greater than at the turn of the century. Five times as many people live on the island as in 1900. The 1940 census showed a population of 406,748 for Nassau, 197,355 for Suffolk, and nearly 1.3 million for Queens. All estimates point to continued growth.

LIRR also maintains an active industrial department that encourages industrial expansion on the island. Freight traffic remains secondary, however, to the flow of commuters. There are no regularly scheduled through freight trains on the Long Island; all runs are switching locals.

The most important commodity handled by the railroad is hard coal. This represented 19.2 per cent of the LIRR's tonnage in 1947. Potatoes, for which the island is noted, are the principal farm product originating on the road, but truck competition has substantially reduced the railroad's share of this traffic to only 4.3 per cent of the 1947 total.

An asset of the island more important to the Long Island than its industry, perhaps, is its playground attractions. The sight of passengers with long fishing rods is common on LIRR trains. Other island travelers, heading for any of the many beaches, carry along bags of bathing suits and towels. Golf clubs ride along with those headed for one of the island's excellent courses and tennis rackets with those going to famous Forest Hills. In season special trains run to Long Island's four race tracks and passengers ardently study the *Morning Telegraph* or the *Racing Form*. In winter skis are sometimes seen on trains bound for Bethpage Park. And polo grounds are served by the LIRR at Westbury.

But the most distinguished passengers as well as many of the most curious are headed for the Capital of the World, also served by Long Island: Lake Success.



Norman E. Kohl.

This Long Island engineer skillfully snares an order[↑] at B Tower, Bethpage, L. I., with no sign of effort as his 4-6-0 clatters through. Over on the East River[↓] a Long Island tug mothers a float of freight cars for LIRR points upstream to the railroad's pier at Long Island City.

