

\$1.50

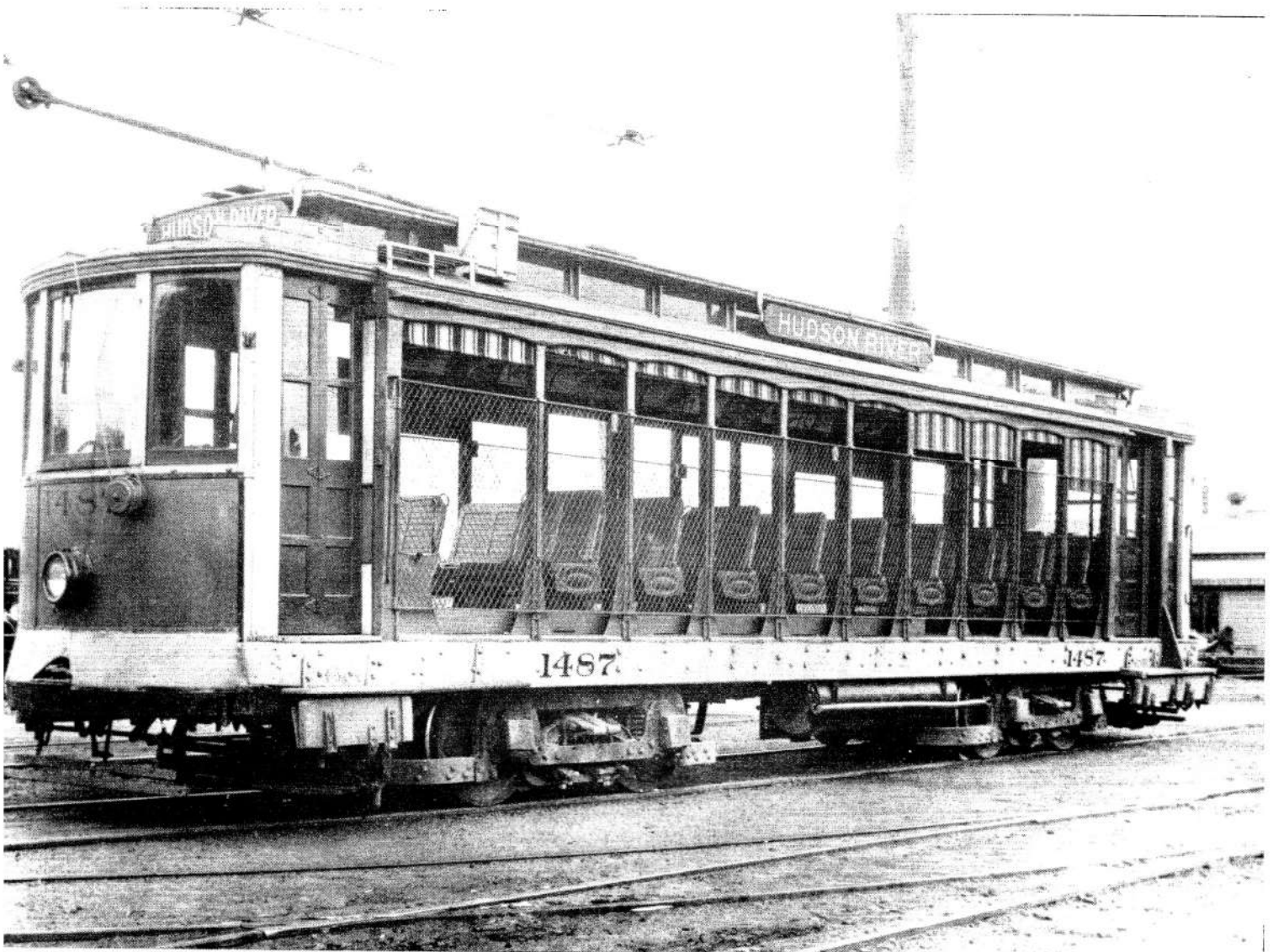


*The Newsletter of the North Jersey Electric Railway Historical Society*

Box 1770, Rahway, New Jersey 07065

Volume 13, No. 2

October 1998



**HUDSON RIVER LINE  
HAND HELD FARE REGISTERS**

## NORTH JERSEY ELECTRIC RAILWAY HISTORICAL SOCIETY

Robert E. Hooper, President  
Frank S. Miklos, Treasurer

Ed Gibbs, Vice President  
Gary Madriss, Recording Secretary

P.O. Box 1770, Rahway, NJ 07065

Meetings are held on the third Tuesday of each month at the Rahway Senior Citizens Center, 1306 Esterbrook Ave., Rahway, N.J.  
Beginning at 7:30 P.M., each meeting features a program featuring electric traction subjects.

Annual dues are \$15.00 per year.

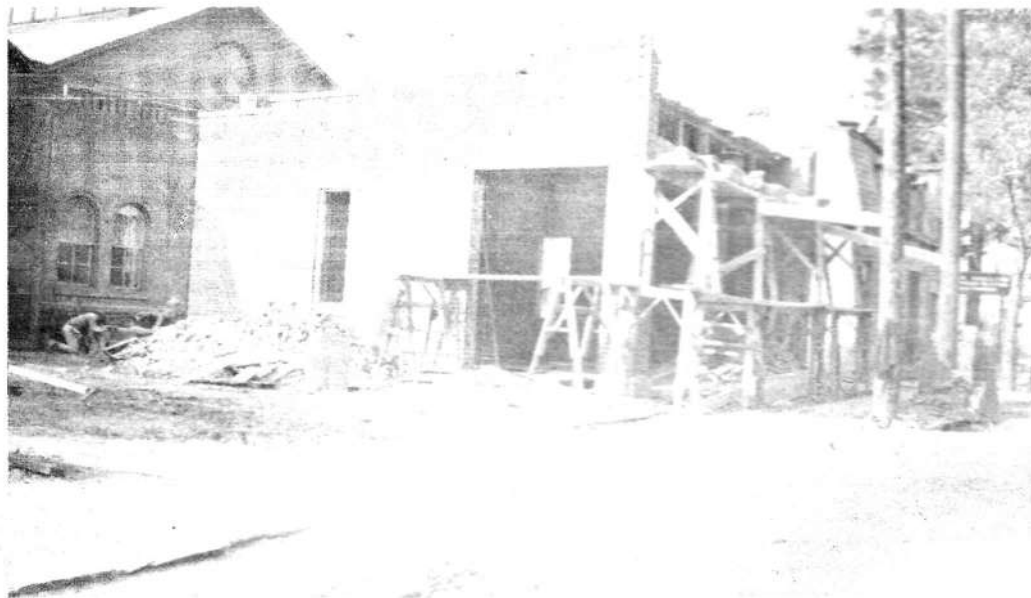
### MEETING LOCATION CHANGE

**NJEHRS now meets at the Rahway Senior Citizens Center, 1306 Esterbrook Ave., Rahway. It is the old post office building. The air conditioned facility is two blocks from Rahway Station. (From the station, go two blocks west on W. Milton St. to Esterbrook. Turn right to 1306 on the left. Ample parking in the rear of the building.**



**Cover Photo: Public Service Car # 1487, a running board open car converted to one man operation. The center aisle and wire guards provided safety, controlled entry but still provided a cooling breeze. At Edgewater Terminal 1926.**

*North Jersey Chapter  
NRHS #92*



*Ed Francis Collection*  
**The commercial building under construction - October 15, 1912. The substation and car house, set back from the street, can be seen in the background.**

**Rear Cover: Public Service operated the ferries at Edgewater. Here the New "Fort Lee" arrives with people, automobiles and people. November 1, 1915**

*Ira Deutsch Collection #1004*

### Research Answers Question

To answer the question raised in D/23 on the PS emblem photographed on the building in Rahway by Bill Keigher, Ed Francis provided several views of the commercial building to which it was attached. One of the photos is presented below. The Rahway carhouse and substation is in the background.

Editor's note: Ed's photo prompted 'yours truly' to dig through my car house archives for a diagram of the Rahway car house. The diagram, dated January 28, 1909, seems to indicate that the car house was not being used, based on the erased switches in the street.

Can anyone provide more information or photos of the car house in use?

**Facing page: Rahway car house diagram. (Courtesy of Ed Hamm)**

# Letters to the Editor

From George Knopf, DeLand, Florida:

I've been keeping the last two destinations in the corner on the top of my desk, and for the last half year, have been opening them up and re-reading one of the great stories in #23 and the interesting comments and stories in #24. In Al Mankoff's letter to the Editor, he reminds us of the footbells, the illuminated arrow and some of the familiar features of the old Public Service trolleys. I've often thought of adding my own little notes to those comments, but felt that perhaps the membership may have had their fill of trivia. However, each time I read any of the features in these two newsletters, I get the urge to "put in my two cents". So, for what it's worth — here goes:

D/23, page 6: As Al mentioned, the arrow did not rise automatically, but was actuated by a spring which raised the arrow into the horizontal position. A cable, attached to the spring and lever ran up the post between the center window and the right window of the platform, and was guided horizontally by a one-inch pulley that sent it out to the arrow. Unfortunately, it was the pleasure of some high school students to ride the back platforms and raise the arrow just as another car was coming in the opposite direction! To eliminate this problem, arrows on double ended cars had an "L"-shaped pin installed at the base of the arrow box which could be turned over to prevent the arrow from raising.

This became an additional chore for the motorman at each switch-back during school hours!

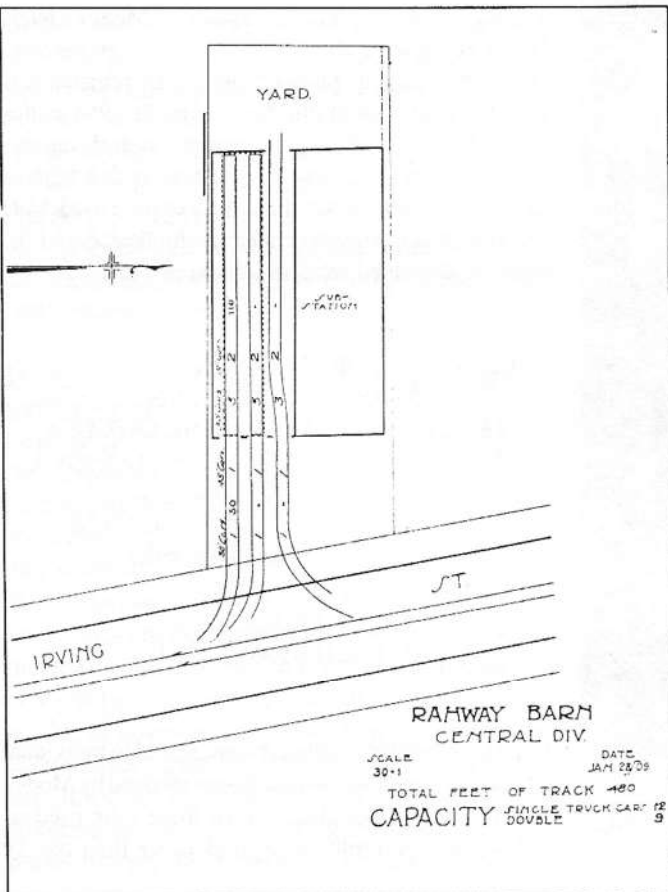
As Al stated, they were installed about 1927-28, about the same time the Public Service emblem and the blue route signs showed up on the sides and roofs of the cars. The first few cars painted with the decals on the sides had the car number under the second window from the platform in the same position it was when Public Service was spelled out. There were a few more, but two cars I remember painted in this manner were 2651 and 2454. After a few months the numbers were removed and placed under the blue circle and red triangle to match the cars now coming out of the paint shop. By the way, the picture of 2605 shows that by 1947, the arrows are gone.

How many of the old timers might remember the approximately 8-inch square electric meter on the blind side of the front platform. Although it was square, it had a round face that little windows where numbers peeked out and counted the number of kilowatts being used up.

On the operating platform of each car, above the controller was a breaker box with a heavy lever which had to be in the "ON" position for the car to run. On occasion, these were known to pop to the "OFF" position with a loud bang and a bright blue flash.

Also, on the platform, fastened to the front end of the car with brackets, between the center window and the live side of the car was a heavy post with a large wheel and handle attached to it. This was the handbrake which was put into use every time the car came up to a railroad crossing. While waiting for the jumper switch to allow the car through the intersection, the motorman

*Continued on page 17*



## Corrections

**Trenton & New Brunswick Rolling Stock** -- The typographical gremlin jumped into Bob Yuell article on page 17. The scrapping date for Car #25 was December 17, 1930. Car #28 was scrapped on February 7, 1930.

**John O'Connor** noted the following typographical errors in his article in D/25: Page 6, the Hudson 17-CENTRAL line terminals would be: Hoboken DL&W - 32nd Street Union City; the 19 UNION CITY line would terminate at West Shore Terminal. The only other error was in the spelling of HADDON, O not E. He further notes that he should have added that "in the first instance 2900 series would be used on 23 CENTRAL until the track connection was made to operate through to Erie Loop."

Our apologies to the authors. Editor.

## PUBLIC SERVICE HAND-HELD FARE REGISTERS

By Margaret and Ed Ruland

As told to Dave Phraner (with some personal recollections added)

While I remember much about riding Public Service streetcar route #29 during the late 1940s and early 50s, the use of hand-held fare registers is not among my recollections. We lived, at the time, in Bloomfield and I rode the streetcars in the late afternoon to and from music lessons or to meet parents who taught for the Caldwell Board of Education. The hand-held registers were used in the morning, inbound peak only. Fortunately, Ed and Margaret Ruland rode "the 29" more frequently than I did and recall the use of the registers well. Margaret worked for Westinghouse in Bloomfield and took the car regularly from her

home in Verona. Ed rode and has memorized much of the P.S. 1930s streetcar system. This then, is their story.

### Money Meter Discovered and Purchased:

Last year an acquaintance and fellow trolley buff Dick Miller (who did the drawing of car 2735 that was so popular a few years back) purchased a strange device at a flea market. When he showed it to us, we both recognized it from our days of riding the #29 Bloomfield streetcar route. It was a hand-held fare register that was used on the 29 between Verona and Montclair. We understand that other trolley companies used these devices but cannot verify for sure, that this "money meter" was actually used on PS or some Pennsylvania trolley system. Pittsburgh Railways used them as well and this register was purchased in eastern Pennsylvania. We are not sure when the practice of hand-helds started on the 29, but it appears to have lasted up to the end of streetcar service. Replacement buses used NCR registers which issued tickets. Though this is somewhat speculative, these hand-held registers may have been used on two-man open cars when the conductor collected fares throughout the car.

The register was designed and made by Money Meters Inc. of Providence, Rhode Island. As one can see from the accompanying photographs, each register was stamped with a serial number, (serial #10,984 in this case). A steel builders plate riveted on each register contained the following information which tells us something about the way these devices were used. Note that one of the patent numbers is duplicated and the numbers displayed were sequential in two series:



PROPERTY OF  
**MONEY METERS, INC.**  
 PROVIDENCE, RHODE ISLAND, USA  
 SOLE MANUFACTURERS AND LESSORS  
 U.S. PATENTS  
 1655649 1718583 1655651 1655650  
 1598153 1718583 1718584  
 DES 71945  
 OTHER U.S. AND  
 FOREIGN PATS. PEND.

It appears that these registers were leased to individual transit operators, but ownership was retained by Money Meters, Inc. It's not clear to us if these were used on Public Service multi zone lines other than the 29

*Dave Phraner photo*

A curious device, the hand held register provided a mobile counting device for peak traffic periods.

Bloomfield and if Public Service owned or leased the registers. Any of you out there know?

### **How they looked and worked:**

These devices were rugged, polished steel, 3 1/2" high x 2 1/4" wide x 6" long and weighed 1 pounds 10 oz. The registers took nickels dimes and quarters through one slot in the top of the machine. Dimes and nickels were tallied on a 4-digit rotating analog display, seen through small glass window on the front of the machine. Quarters were tallied on another analog counter through a window on the other side of the register body. The counter *registered coins, not value*. For example, a nickel would register as one transaction on the display. A dime would register as two transactions. A quarter would register as one transaction on the other display. A pleasant single bell note sounded as the coin was registered. The bell note was the same pitch for all three denominations of coin. A small round window above the builder's plate indicated when the register was cocked to accept coin. Each time the meter registered a coin, the machine had to be recocked. An index finger activated trigger cocked the register, but the coin forced into the slot by the passenger would activate the counter. Everything was mechanical. No electronics were involved. The slot would not accept a coin until the machine was cocked.

The machine is very solidly built both to withstand the rigors of hard use and to discourage tampering.

To the left of the round window appears to be a key slot for a special two-prong key to open the device for repairs or resetting the displays. The register case appears to split into two sections when keyed open. A key did not come with this machine. Such keys would not have been in the possession of the trolley conductor, in order to prevent tampering. The body of the register also featured a small round stud that appears to be used for a strap or tether to secure the device around the neck or hang it from a belt.

### **How Fares Were Paid With the Hand-held Register:**

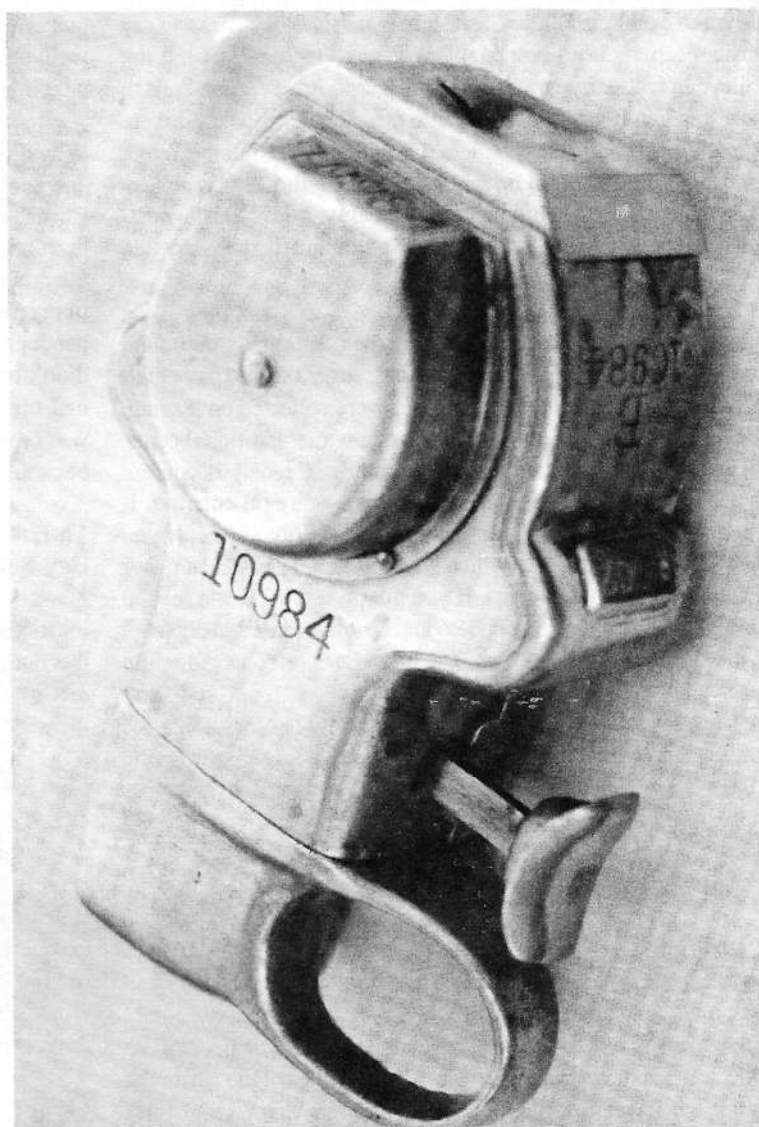
Coins were inserted by the passenger, passed through the counter, triggered the audible signal, then exited the machine through a large slot formed in the bottom of the device. The conductor did not touch the currency until it had passed through the register and was counted. In common with the Johnson D and J car mounted fare boxes, these fare devices registered fares and nothing more. They did not hold coin in a vault because they contained no vault. After the coins were registered, the conductor or motorman recovered the coins, inserted them into the barrels of his change maker. The register kept track of how many coins of what type he had collected. Entries on the trip report or day sheet were made showing starting and ending numbers during a trip or tour of duty. The money meters could not be

reset to zero unless dismantled (again to discourage tampering), so continuous, consecutive readings were shown on the register and recorded on the operator's day sheet. The registers and day sheets were submitted together.

### **Why a Hand-held Register? Why on "The 29?":**

Why, you ask, would such a device be used when each car was provided with a stanchion or pedestal mounted fare box next to the motorman? Why would Public Service employ a fare collector or conductor, other than the motorman, particularly when they went to such effort to eliminate two-man operation after World War I?

It seems, that for all the reasons stated above, the hand held register was not commonly used by Public Service. There were isolated



*Dave Phraner photo*

**The devices were numbers on all faces. The register was manual operated.**

circumstances in which a second fare collector and hand held fare registers were employed on the one-man cars...and the 29 Bloomfield was such a case in point. Here's how it worked.

Route 29 was a three fare zone line. Fare limits were at Watsessing Ave. (near the Erie Railroad's Orange Branch crossing of Bloomfield Ave. and the proposed new shops of the City Subway on Grove St.) in the Watsessing section of Bloomfield and at the intersection of state highway route 23 (Newark Pompton Turnpike) and Bloomfield Ave. near the Verona-Montclair boundary. A White Castle Hamburger joint on the corner of Route 23 endowed the fare limit with the name "White Castle" by regular users of the trolley.

The author remembers the place well as I almost became a pedestrian casualty at that spot. Wishing to save seven cents on my way to my piano lesson in Verona, I would alight from an outbound car at the White Castle and walk six blocks or so to my music teacher's house on Malvern Place. One day as I left the trolley, an inattentive mother driving her kids to Verona Park to skate, ran her 1940 Studebaker into me. Sheet music and I went flying. Being young and resilient, I was uninjured, but the White Castle was imprinted on my memory. Riding the 29 was always an adventure, but for obvious reasons, I always favored the post-music lesson return trip rather than the outbound trip to the lesson.

### **Outbound Fare Collection:**

Fares were collected by the motorman conventionally outbound from Newark as follows: First zone passengers would pay enter, second zone fares and third zone fares were collected on leaving. The base fare was 5 cents and each zone was 5 additional cents. No zone checks or tickets were issued that we recall. If you got on in the first zone you paid your one zone fare on entering. If you got off in the first zone, you paid no additional fare. If you got off in the second zone (which was pay leave) you paid another nickel for a total of ten cents. If you got on and off in the second zone, you paid a single fare on leaving. If you entered and departed in the third zone (remember that this just applies to outbound journeys) you paid upon one fare upon leaving. If you rode into the third fare zone from the second you paid another nickel. If you got on in the first zone (5¢) and got off in the third zone (10¢), for a total of 15¢. The motorman was supposed to remember who got on in the first zone to determine whether someone leaving the car in Verona or Caldwell would pay a nickel or a dime. (They had pretty good memories for places and faces.)

### **Inbound Collection, Using the "Money Meter":**

Inbound fare collection was different because of the riding and peaking characteristics. The hand held registers were used only in the inbound direction, during the morning peak on the 29. The collector (his name was Otto) would get on board the car in the vicinity of Lakeside Ave. in Verona (next to Verona Park). He would collect an extra nickel from each passenger intending to ride inbound beyond the fare zone at the White Castle. If someone got on an inbound car at the Annin Flag Company just a few blocks short of the fare limit at White Castle, one would drop a nickel in the box and Otto would get you for another nickel. Since

the second zone inbound was also pay enter, one leaving the car in Montclair or Bloomfield one would have already paid 5¢ or 10¢. The third zone inbound in Newark was pay leave and you dropped another nickel in the box.

Since the morning peaks were more concentrated and heavier volumes of inbound commuters were common. Otto and the motormen performed fare collection in the Caldwell Verona zone. The last inbound zone was pay leave. So, if you boarded in Caldwell, you paid a fare on entering, paid another fare to Otto the collector, and when you got off at Newark, you paid another fare...a total of three nickels, one for each zone. Why, you ask, didn't they need to use Otto and this money meter on the outbound trip?...fewer passengers and therefore the motorman was responsible for remembering who got on and where. Otto, the roving fare collector, would cycle back and forth during the AM peak only between Verona and the fare limit, deadheading outbound on the first available car. If the schedule was performing well, Otto could get back to Lakeside Ave. before catching the next inbound car.

Why didn't Otto get to collect the zone fare right at the fare limit and avoid the round trips between Lakeside Ave. and the White Castle? Ridership was so heavy on some morning inbound trips, that Otto needed all the time he could get to elbow his way through the crowd of standees in the aisles, rear platform and the cluster of people holding on to the standee straps where the longitudinal benches were located in the front and rear of the cars. Since he didn't collect fares on the outbound trip, he left the car when he had finished rather than ride all the way to the fare limit. This was especially true if an outbound car appeared to return him to back to the Park.

There was (and is) a comparable means of collecting fares on the City Subway in the evening peak from the three downtown Newark stations. Collectors are positioned at former turnstile locations in these stations to collect fares before passengers enter the outbound cars. At non central business district stations, motormen collect fares pay enter in the PM peak period. After the peak, the City Subway reverts to pay leave outbound.

Like the contemporary PCCs, the 2600, 2700 and 8000 series cars assigned to the 29 had flip signs inside the front right window, designating whether fares were to be collected on entering or leaving. A motorman on the 29, once his outbound car arrived at Watsessing Ave. would flip the sign from "pay enter" to "pay leave." When he got to Caldwell Loop, he would change the sign to "pay enter." At Watsessing Ave. Bloomfield, the motorman would flip the sign to "pay leave" and keep it positioned so for the rest of the inbound trip to Newark Penn Station.

### **Other Views and Recollections:**

The "Money Meter" was shown around at recent events and several veterans verified that Public Service used them. It is not clear where else (if anywhere on the PS system) they would have been used. It would have had to be on a three or more zone line

*Continued on page 16*

## THE HUDSON RIVER LINE PUBLIC SERVICE ROUTE 1 (BERGEN)

by *Edson L. Tennyson*

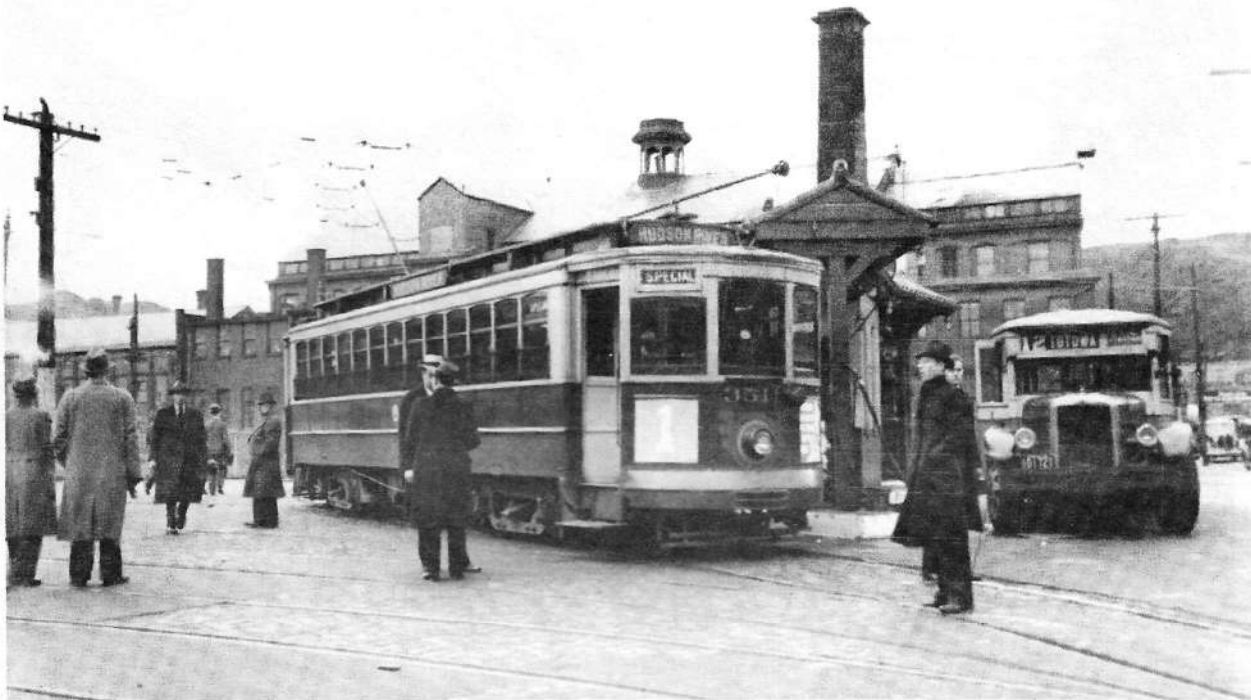
Sixty years ago (1938) Public Service Coordinated Transport ended interurban trolley service in Bergen and Passaic counties in New Jersey after 35 years of useful operation. Local city trolley service in Paterson had ended previously and the intercity lines to Jersey City (Route 15-Passaic) and to Newark (Route 17-Paterson) had stopped the previous year. The Suffern line, most interurban of them all, had served Paterson only in 1926 and 1927. Transit travel since then has never been the same. The joy and pleasure of the ride was lost along with the big electric rail cars. Ridership counts confirm the loss of public interest.

The Hudson River Line was built by A. Merritt Taylor of the New Jersey & Hudson River Railroad & Ferry Company who sold the line to Public Service in 1911. Taylor took the proceeds to Philadelphia where he bought the Philadelphia & West Chester Traction Company which he enlarged into one of the nation's premier suburban transit systems. Although it went bankrupt in the Great Depression, he reorganized it effective as the Philadelphia Suburban Transportation Company, the Red Arrow Lines. Its Media and Sharon Hill lines are still operating as part of the Southeastern Pennsylvania Transportation Authority system.

A trip over the Hudson River Line began at Paterson's Broadway Terminal, on the south side of Broadway just west of Main St. It was less than a mile from Passaic Falls where Paterson's industrial development was introduced in the 19th century. An off street loop and spur siding provided layover and waiting space for loading prior to departure time. A small stucco, tile roofed building provided the supervisor's office in the center of the loop.

The deep crimson Hudson River cars with yellow window posts looked very much like other pre-World War I trolleys that Public Service operated, with their monitor deck roofs and painted board route signs on all four sides of the monitors. Destination signs were located over the windows closest to the front door both in the front and on the side. Hudson River cars were double end for peak hour and emergency turn-backs en route.

Less obviously, the cars were unlike other Public Service trolleys. They had only a single stream doorway instead of the usual double stream doors at all four corners. At night, the cars carried a huge Golden Glow portable headlight mounted under the front center window above the city headlight, so that the motorman could spot a waiting passenger out along the dark right-of-way 800 feet



*North Jersey Chapter NRHS # 1069 Frank Miklos Collection*

To illustrate our trip on the Hudson River Line, we start at Paterson. This scene on March 27, 1938 shows the gala seven car Farewell fan trip on the Public Service system. Here Car #1 of the seven, PS 3511, shares a platform with its future replacement as it waits for passenger reboarding during the stop at Paterson.

ahead. This headlight was often removed in daylight hours to prevent damage to it at grade crossing collisions.

The interurban cars were numbered in the 3510 series, far above the numbers of other cars, because they were the original Trenton Fast Line cars. They were sent north to the Hudson River Line in 1916 when the Trenton Line was equipped with even faster larger, heavier all-steel cars, the 3600s. Some of these also ended their days in Bergen County on the Englewood Line, Route 5.

Upon boarding at Broadway Terminal in Paterson, the motorman asked passengers for their destination. He had a small wooden rack near the air brake lever on his right which contained five different hat check numbers which he issued to passenger as their fare receipt, to be surrendered upon leaving the car. There were five nickel fare zones, but the maximum fare had been reduced to 20 cents to compete with the George Washington Bridge buses. Sixteen miles for twenty cents was economical transportation, one and one-quarter cents per mile. The Fonda, Johnstown and Gloversville and the Piedmont & Northern interurbans went as low as one cent per mile to stimulate travel in the depths of the Great Depression, but two cents per mile one way and one and one-half cents round trip were more standard.

Passengers deposited their fare in a standard Johnson registering fare box behind the motorman. It rang once for each five cents worth, twice for a dime, five times for a quarter. A counter was mounted above the vestibule so the company could verify that everyone paid. The hat checks assured the motorman that people getting off had paid to go that far. A trip from Paterson to Hackensack cost a dime, Leonia and Palisades Park cost 15 cents and all the way, sixteen miles to Edgewater cost twenty cents. A load of 32 passengers on board at all times covered all costs. There were 48 seats, and a hundred passengers could be carried if necessary. Rush hour loads of sixty were acceptable.

The soft, padded, heavy leather seats on the "deluxe" Hudson River cars were system standard, with 36 of them facing forward walk-over seats with aisle-side hand grips. Three seats in each corner of the car over the sand boxes were longitudinal with overhead straps for straphangers to hang from. The ride was comfortable, with electric heat in the winter and suburban breezes through the open windows in summer. Warm motor insulation smells wafted in through the open windows at car stops.

Leaving Broadway Terminal in Paterson, it was soon obvious that these were not city trolleys. Instead of the harsh grinding of traction motor gears, a lower pitched whir offered assurance that



*North Jersey Chapter NRHS # 269j - Frank Miklos Collection*

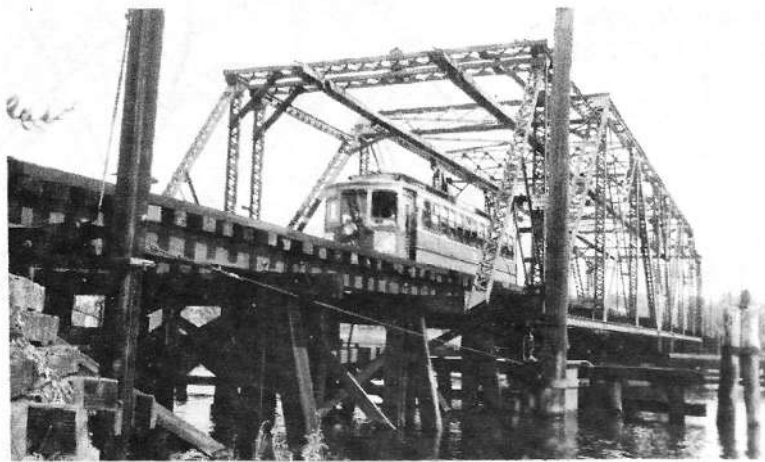
**Car 1875 on 1st St. at Central, Hackensack. The NYS&W Bridge is in the background. Spring 1930**





North Jersey Chapter NRHS # 545 - Frank Miklos Collection

Public Service 3514 descends on private right of way from the Hackensack River Bridge near First St., Hackensack - October 29, 1933



Wilbur Sherwood photo - Frank Miklos Collection

Crossing the Hackensack River required a movable bridge as the river was navigable at that point. PS built a double track swing truss bridge. The car carries a Golden Glow headlight normally carried only at night on the Line. The bridge survives today as a highway bridge.

PUBLIC SERVICE COORDINATED TRANSPORT  
BERGEN DIVISION ROUTE 1 - THE HUDSON RIVER LINE  
Schedule Effective June 3, 1936

Tmin	PATRNS	HACKSK	LAONIA	EDGWT	am	EDGWT	LAONIA	HACKSK	PATRNS	Tmin
6	#5:07	#5:45	#6:05	#6:24	am	#5:27	#5:47	#6:06	#6:45	am 1
7	#5:22	#6:00	#6:20	#6:39		#5:42	#6:02	#6:21	#7:00	2
8	#5:37	#6:15	#6:35	#6:54		#5:57	#6:17	#6:36	#7:15	3
9	#5:38	#6:15	#6:35	#6:54		#6:12	#6:32	#6:51	#7:30	4
9	#5:52	#6:30	#6:50	#7:09		6:27	6:47	7:06	7:45	5
10	#6:07	#6:45	#7:05	#7:24		6:42	7:02	7:21	8:00	6
10	#6:09	#6:46	#7:05	#7:24		6:57	7:17	7:36	8:15	7
11	#6:22	#7:00	#7:20	#7:39		7:12	7:32	7:51	8:30	8
12	6:37	7:15	7:35	7:54		7:27	7:47	8:06	8:45	9
1	6:52	7:30	7:45	8:09		7:42	8:02	8:21	9:00	10
2	7:07	7:45	8:05	8:24		7:57	8:18	8:36	9:15	11
3	7:22	8:00	8:20	8:39		8:12	8:32	8:51	9:30	12
4	7:37	8:15	8:35	8:54		8:27	8:47	9:06	9:45	1
5	7:52	8:30	8:50	9:09		8:42	9:02	9:21	10:00	2

and every 15 minutes thereafter at the same times each hour until:

	PM	PM	AM	AM	PM	AM	AM	AM
1	11:07	11:45	12:05	12:24	11:42	12:02	12:21	1:00
2	11:22	12:00	12:20	12:39	11:57	12:17	12:36	1:15
3	11:37	12:15	12:35	12:54	12:12	12:32	12:51	1:30
4	11:52	12:30	12:50	1:09	12:27	12:47	1:06	1:45
5	12:07	12:45	1:05	1:24	12:42	1:02	1:21	2:00
6	12:22	1:00	1:20	1:39	1:12	1:32	1:51	2:30
7	12:37	1:15	1:35	1:54	1:42	2:02	2:21	3:00
8	12:52	1:30	1:50	2:09	2:12	2:32	2:51	3:30
10	1:27	2:05	2:25	2:40	3:12	3:32	3:51	oo
1	2:31	3:07	3:25	3:41	4:12	4:32	4:51	5:30
	AM	AM	AM	AM	AM	AM	AM	AM

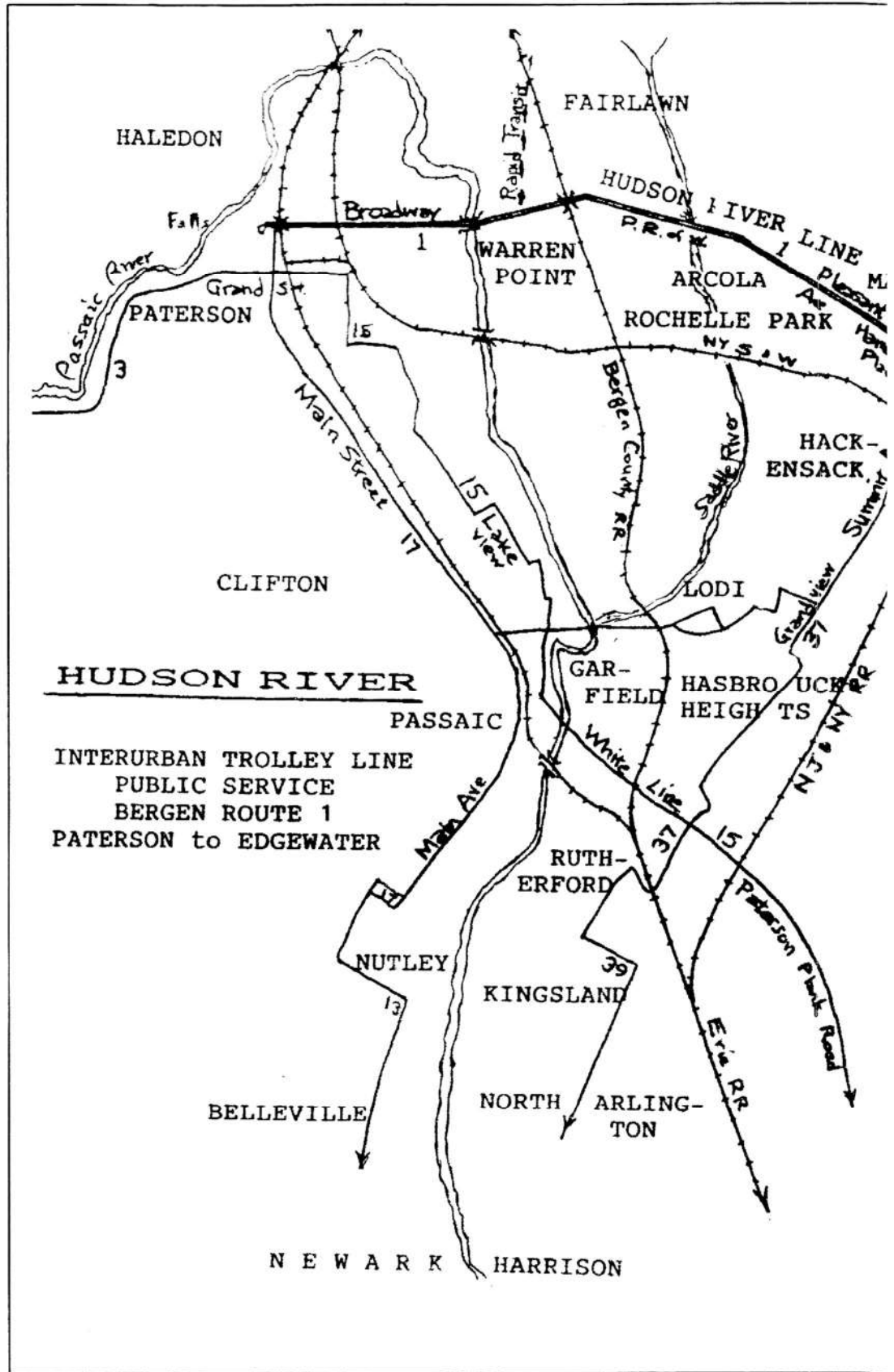
# = Service daily, except Sundays and Major holidays  
§ = Service Sundays and Major holidays only

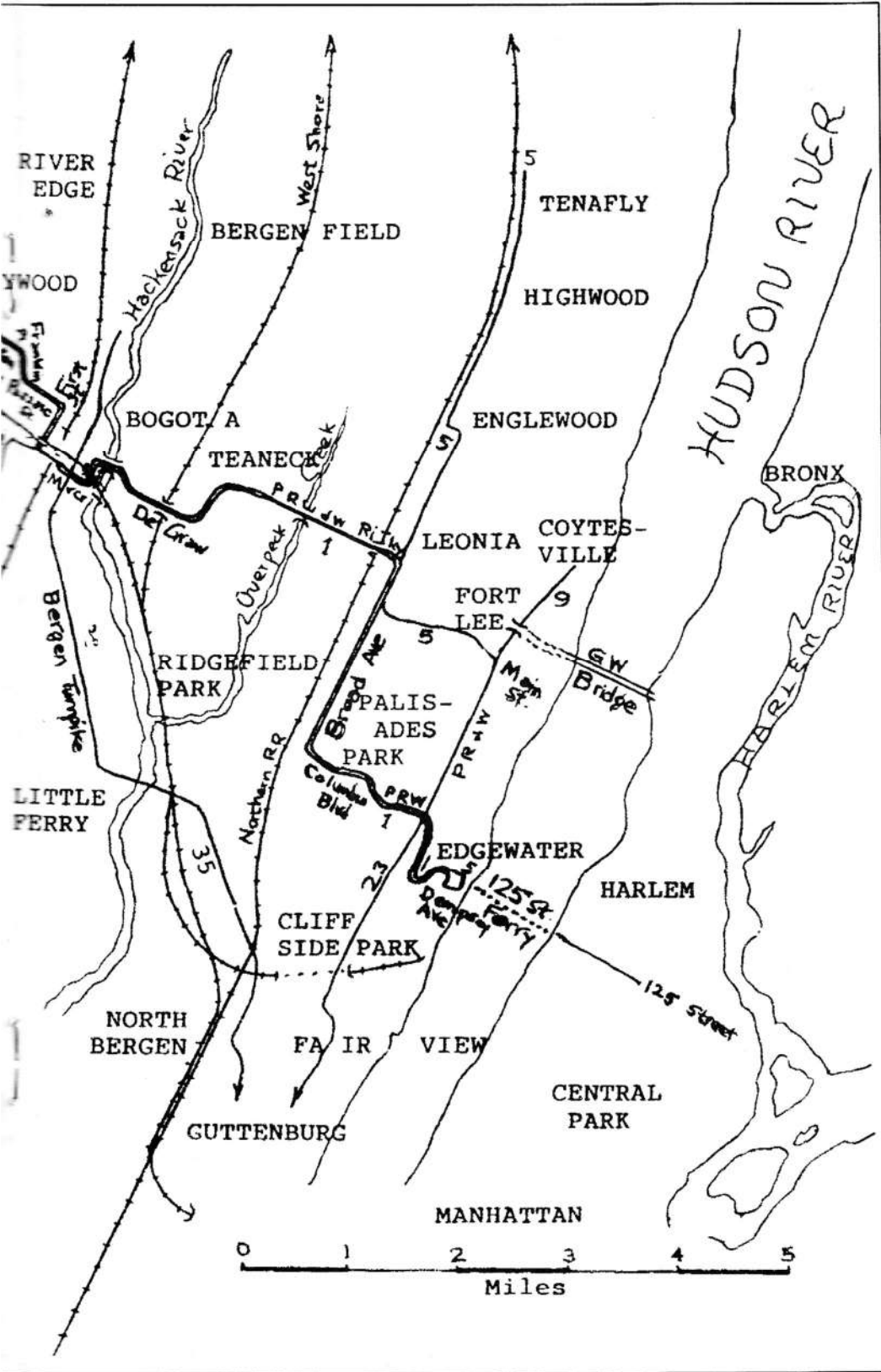
these cars were geared for speed, at least 50 miles per hour where the highway speed limit was 40.

Broadway in downtown Paterson was anything but broad. After passing under the new Erie Railroad overhead bridge, Broadway widened a bit after it crossed the New York Susquehanna & Western Railroad at grade. These railroads provided much faster service to Jersey City and Manhattan by ferry, so that travel was not by trolley, which delivered people to 125th street in uptown Manhattan near Harlem.

In East Paterson, Broadway was really broad. A handsome new concrete bridge carried traffic and interurbans over the Passaic River into Bergen County and the former junction with the North Jersey Rapid Transit to Suffern, N.Y. After passing under the Bergen County Railroad (Erie) in Warren Point, the interurban curved gently to the right and took off on private right-of-way through Saddle River. The girder bridge over the Saddle River reverberated hollowly as the car sped across, and into the woods beyond. In Rochelle Park, the fast pace continued to the Passaic Street grade crossing, beyond which speed resumed as the car passed under New Jersey highway 17 as it approached Maywood. Passengers here could sometimes watch a race, in winter when leaves were down, with Garden State buses on Passaic Street just south of the rail line.

Further into Maywood, Pleasant Avenue began to appear on the right-of-way. By the time the Hackensack city line was crossed and the street name changed to Hamilton Place, the pavement was in perfect suburban appearance, with full curbs, gutters and sidewalks. The interurban curved gradually to the right onto Franklin Place, then sixty degrees to the left onto Passaic Street. At First Street, a



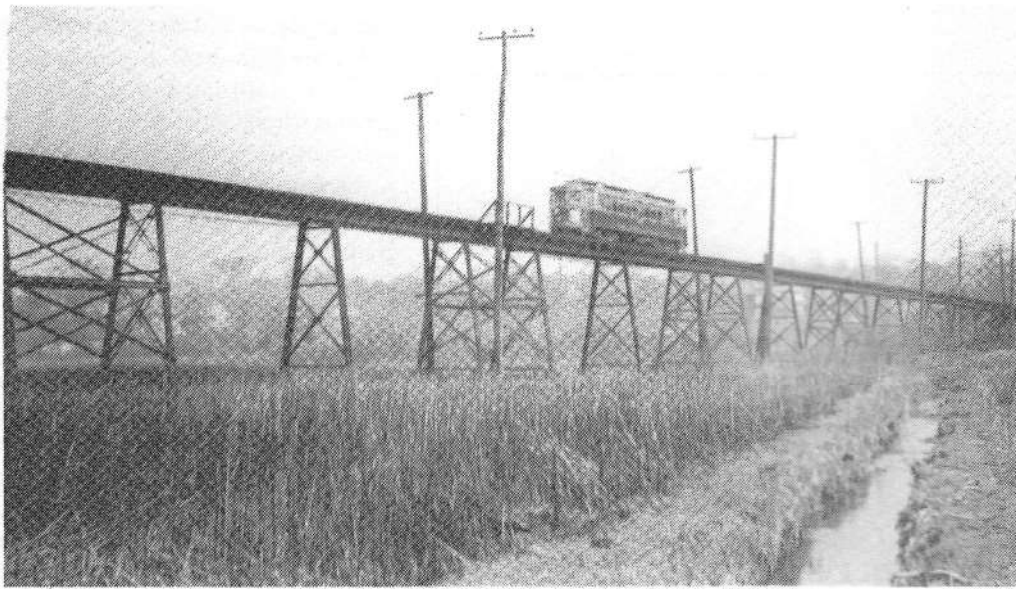


Map by E L Tennyson

sharp right took the cars down First Street under the New York Susquehanna & Western Railroad to the Route 37 junction where that route extended on the right on its way to Newark prior to 1928. At this former junction, the Hudson River cars turned sharp left and ascended the grade onto single track to cross over the New Jersey & New York Railroad while paralleling the Susquehanna tracks. Beyond the truss bridge, the tracks dropped down again to the tiny Hackensack car barn and double track on Mercer Street, surely the narrowest street on the system, with no room for automobile parking. The Susquehanna Railroad station served interurban passengers unofficially here, 38 minutes and 8 miles from Paterson.

At the east edge of Hackensack, Bergen's county seat, the interurban curved sharply left onto River Street and back under the Susquehanna Railroad only to turn sharply right onto filled private right-of-way to reach the Hackensack River bridge, a draw truss structure. The rail joints and wire arrangement for the draw bridge required slow speed. In 1998, this bridge is still in use as a highway by-pass. It will soon be one hundred years old.

Beyond the bridge, the right-of-way curved gently right (south) then left onto Maple Street, Bogota. Then the rails ascended again to cross a private girder bridge over the West Shore Railroad (New York Central, now Conrail). Beyond this bridge, the tracks descended onto DeGraw Avenue into Teaneck. At the east edge of Teaneck, private right-of-way began again as the tracks turned north (left) and then east (right) to cross Overpeck Creek on a single track trestle, beyond which the tracks crossed the Northern Railroad of New Jersey on another trestle before entering Leonia on Hillside Avenue where the tracks were "side-of-the-road". Fifty-seven minutes and twelve miles from Paterson, the Hudson River line joined the Englewood Line (Route 5-Bergen) on Broad Avenue after making a sharp right turn to the south. Broad Avenue trackage was laid



*Steve MacGuire photo - Frank Miklos Collection*

#### **A PSCT 3500 series car climbs the trestle at Bogota**

in solid concrete and was the noisiest on the system with no insulation between the rail web and the concrete.

Soon, the Englewood line took off on a single track to the left, headed for Fort Lee, while the Hudson river cars continued a mile and a half (four minute or five) down Broad Avenue to US Route 46 and Columbia Boulevard, onto which the interurbans turned left and uphill above Route 46 with its underpasses for cross streets. This is the Morsemere section of Palisades Park Borough, where the cars entered private right-of-way again to dip through the valley and curve upward again to Palisade Junction with both the Englewood and Palisades (Route 23-Hudson) lines. The famous amusement park was at this location. Palisade cars ran south to Weehawken, and Englewood cars rejoined the Hudson River Line to descend to Edgewater. Peak period cars also ran north occasionally to Coytesville until 1935. The trolley right-of-way through Palisade Junction is still visible in 1998.

East of Palisade Junction, the interurbans "went over the edge" of the palisades cliffs, going half-way down on a ledge carved out of the rock when the line was built.

Emergency switch points were set to lead a runaway car into sand boxes unless the motorman went slow enough to allow the switches to set up for the main line.

Half-way down, a horseshoe curve was carved out of the rock, turning cars around to head north until Dempsey Avenue was reached, where they turned right to the edge of the Hudson River at the Edgewater Ferry Terminal and car house. New York City was clearly in view all the way down, a spectacular sight on a clear day.

Returning to Paterson from Edgewater, the cars did not use Dempsey Avenue, but

left the terminal a block north and proceeded straight to the foot of the cliff, creating a loop in Edgewater. The complete 16.2 mile trip had consumed 77 minutes, a little faster than city bus service in 1998, but not comparable to 1998 light rail speeds. Much of the street running was very slow speed.

After August 1938, Public Service used little 30-foot General Motors (Yellow Truck and Coach) buses on long headways to try to serve as much of the Hudson River rail line as they could. It does not appear that Public Service expected the buses to be successful. There is no Hudson River Bus Line today that



*Wilbur Sherwood photo - Frank Miklos Collection*

#### **Public Service 3534 on the Hudson River Line - Palisades Township - May 29, 1938**



*North Jersey Chapter NRHS # 548 Frank Miklos Collection*

**The Hudson River Line ran on Columbia Ave. crossing the Palisades Line (on Abbott St.) at Palisades Junction, Fort Lee, NJ - May 1, 1934**

compares with the interurban route. Company policy mandated that all rail lines be removed from service. A consent decree was entered in federal court about 1954, in which Public service promised not to conspire to remove any more rail line. There were none left to remove. The City Subway was owned by the City of Newark.

During the Great Depression of the 1930's, the fifteen minute Hudson River Line headway (service frequency) served almost 15,000 weekday fares, but the Johnson fare boxes did not count people. They could only count nickels. About 5,500 actual passengers rode the line each day. With twelve cars required for the 15 minute headway, the average of 460 per car per day compares very well with New Jersey Transit's 1995 bus coverage of only 236. If two or three peak "tripper" were added to the old interurban line for heavy travel, the average weekday loading per car may have been only 367, still well above current bus patronage by 56 percent. Passengers had to adapt to the bus service or find another means of travel. Too many found another way to go.

Even after the George Washington Bridge for highway travel opened in 1931 between Fort Lee and Manhattan above Harlem, the road down the Palisades approaching the Edgewater Ferry Terminal was jammed with automobiles on many Sunday evenings because the ferry toll was only a quarter, but the bridge toll was fifty cents. That fifty cent toll would compare to a \$6 toll at 1998 prices and wages. The savings made possible by five, then, fifteen and twenty cent trolley fares loomed large in depression era budgeting.



*North Jersey Chapter NRHS # 84 - Frank Miklos Collection*

**The trip up or down the Palisades at Edgewater was a steep hair raising double track right of way. Open car 1058 on the Hudson River Line is followed uphill by 3537 on the Englewood line. The downhill track had a sand pit to catch run aways. July 10, 1923**



*Frank Miklos Collection*

The closely spaced legs of the tracks scaling the Palisades were joined by a sharp double tracked horseshoe curve. The curve replaced a rather inadequate switchback which included a double crossover between both tracks.



*North Jersey Chapter NRHS # 546 - Frank Miklos Collection*

The 3514 is outbound (up) skirting around the rear of the car houses to climb the grade up the Palisades.

## BERGEN COUNTY TRANSIT NOTES

by Frank S. Miklos

Mr. Tennyson's article on the Hudson River line is significant in that it covered a rail service that was built to the highest standards. In the 1970s I joined Dave Ashley in hiking the abandoned Bergen County trolley rights of way. We walked the Palisade Line, the Hudson River Line and the North Jersey Rapid Transit Line.

When hiking the Hudson River Line we ventured down from the top of the cliff in Fort Lee, hoping to see the famous horseshoe curve. The right-of-way was there, but was overgrown with trees and other vegetation. It was like fighting a path through a jungle, but it thinned out as we made our way down the grade and soon we found the curve. In the days of the trolleys there was a beautifully landscaped flower bed in the center of the curve, but we found it barren and forlorn. In a few places the right-of-way was eroded through washouts. We wisely elected not to continue on to Edgewater because the conditions beyond the curve seemed even more challenging with much thicker vegetation.

Returning to the top of the Palisades, the Hudson River right-of-way was intact until just before it emerged onto Columbia Avenue in Morsemere. Palisades Junction was very noticeable with the former Palisade Line right-of-way continuing to intersect the abandoned Hudson River Line right-of-way. In Morsemere a gas station was built at the point where the right-of-way joined the street. Rails were still visible in Columbia Avenue, but were removed about two years ago. All of the overpasses spanning the right-of-way in Fort Lee and Palisades Park were intact and remain in place today.

The rails on Broad Avenue have been paved over and the street itself is lined with stores. Photos taken in the heyday of the trolley line show a rather uncongested roadway. Today traffic is slowed by cars making left turns and double-parked delivery trucks in this busy retail district, a by-product of the automobile age. At Hillside Avenue where the line turned off Broad Avenue there were no traces of the rail line. In trolley days this was known as Leonia Junction. All vestiges of the long trestle spanning Overpeck Creek have been removed. Today the huge Overpeck office complex spreads out parallel to busy highway I-95. A short stretch of right-of-way leading to DeGraw Avenue was still

visible when we took our hike, but this has been obliterated by I-95's maze of exit ramps.

The trolley right-of-way between Bogota and Hackensack was converted into a roadway including the trolley bridge over the Hackensack River. In Hackensack the abutment for the trolley bridge over the New Jersey and New York Railroad (now called the Pascack Valley Line) remains in place as does the ramp leading to First Street.

Beyond Maywood, the right-of-way remains in place including the Route 17 overpass. While hiking this section of the line we found some spikes that were left behind when the rails were lifted. West of Farview Avenue in Paramus, the right-of-way was paved for an access road to the Garden State Plaza shopping mall, which is New Jersey's largest. On the east side of Farview Avenue rails have been driven vertically into the ground to prevent motorists from driving onto the right-of-way. As recently as 1996 an old brick Public Service substation building was set back from the paved right-of-way. Complete with a concrete Public Service circle and triangle logo, it served as a silent reminder of the days when it supplied power to the trolley line. The structure was demolished to make way for new condominiums.

Abutments for the trolley bridge over the Saddle River remain, but no trace of the right-of-way in Fair Lawn exists. Suburban houses with winding streets have obliterated the rail line. The median reservation on Broadway (Route 4) in Fair Lawn and Elmwood Park (formerly East Paterson) remains, but is slightly narrower. Rails were still visible in one of the crossings with an



North Jersey Chapter NRHS # 534 - Frank Miklos Collection

**A 3500 series car passes the Edgewater carhouses. Three ferries line the waterfront. April 12, 1934**

intersecting street, but these have since been paved over. There are no traces of the North Jersey Rapid Transit Terminal in Elmwood Park.

Bergen County's population has increased substantially in the years following World War II. Roads such as Routes 4 and 17 which were built for 1930's traffic are congested at all hours. Public transportation in the county remains healthy. Train service on the Bergen County Line has been improved with Sunday service restored and more off-peak and Saturday service. The single-track Pascack Valley Line currently operating peak hour peak direction service, only on weekdays is scheduled to be upgraded with sections of double track to allow for service in both directions.

Bus service has enjoyed phenomenal growth, with service on routes such as the 166 Dumont-New York, and the 167 Harrington Park-New York operating on less than a three-minute headway in the rush hours. The 171 route between Paterson and the George Washington Bridge bus station in New York is one of NJ Transit's most profitable services. There is no longer a Hudson River bus route providing direct service between Paterson and Edgewater. However local bus service is operated along the entire length of the old trolley line. The 770 route covers the portion of the line between Paterson and Hackensack, while the 751 route covers the portion of the line between Hackensack and Edgewater. The Hackensack bus terminal allows for easy transfer between the two routes. The old trolley bridge between Hackensack and Bogota was recently closed for structural repairs. The three bus routes using that structure, including the 751, now detour via the Cedar Lane Bridge in Teaneck. There is some doubt that buses will be allowed to use the trolley bridge when it is reopened. A weight restriction will probably be imposed due to the age of the structure.

The 751 bus service was recently changed to terminate at the Edgewater Commons, a large new shopping mall built on the banks of the Hudson. The owners of the mall are very supportive of public transit and have provided convenient boarding locations for the passengers as well as a place for the buses to layover between trips. A branch of the 751 route provides alternate service to the Nungessers section of North Bergen via Cliffside Park and Fairview. Nungessers is an important hub for many bus routes to New York, Jersey City and Hoboken.

Light rail will return to Bergen County within the next few years. The new line along the Hudson River from Bayonne and Jersey City will also serve North Bergen and terminate at the Vince Lombardi park/ride in Ridgefield. Recently Bergen County officials announced plans for passenger rail service along several corridors including the former Erie Northern Line through Tenafly; the West Shore Line through Bergenfield, and the Susquehanna through Hackensack. Both of the latter lines carry heavy freight traffic making passenger rail service difficult to restore, especially on the single track sections of the Susquehanna, but this may change after CSX Corporation and the Norfolk Southern complete their acquisition of Conrail. Light rail is one

of the modes under consideration for these services. If this is chosen, one could see light rail trolleys operating along the Susquehanna Railroad to Saddle Brook thereby serving most of the communities once served by the Hudson River trolley line. At the same time a light rail service over the former Northern Line would in effect restore much of the old Englewood trolley line. Thus some sixty years after some of New Jersey's finest trolley lines were abandoned, Bergen County may see some of the mistakes of the past undone.

Miles:		Time:	Miles:		Time:
0.0	Edgewater	0:00	7.7	Hackensack	0:39
1.1	Palisade Junct.	0:07	8.3	Route 37 Junct.	0:43
2.4	Palisade Park	0:12	8.9	Passaic-Franklin	0:47
4.2	Leonia Junctn	0:20	9.7	Maywood	0:51
5.9	Teaneck	0:27	11.0	Arcola	0:55
6.9	Bogota	0:33	11.7	Saddle River	0:57
7.7	Hackensack	0:39	12.8	Warren Point	1:00
			13.9	Passaic River	1:04
			15.2	NY S & W RR	1:10
			16.2	PATERSON B'Way	1:18

#### HAND HELD REGISTERS - Continued from page 6

with heavy volume of travel. This reduces considerably, the possible streetcar routes where these registers could have been used. The longer distance routes were three or more zones, but lots of local riding, outer volumes were modest and the motormen could keep track of who got on and where.

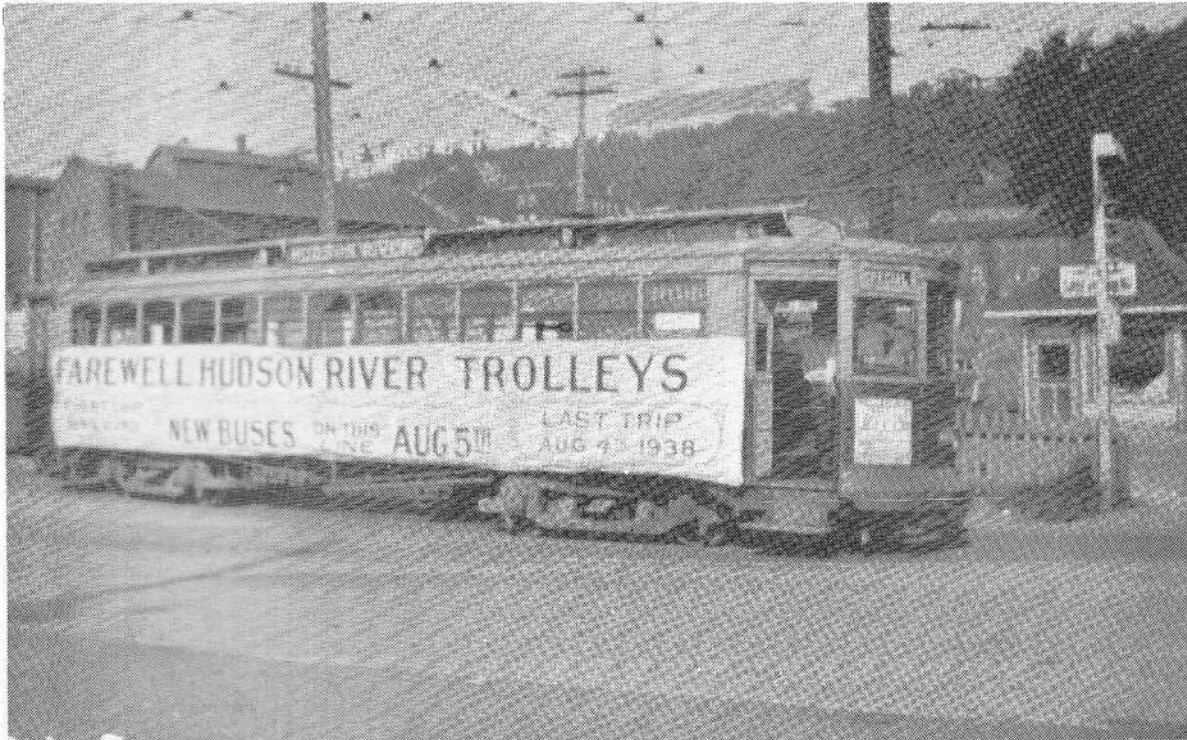
#### Postscript:

Ed and Dick attended Shore Line Trolley Museum (Branford) 1998 Member's Day (May 2) as this article was being prepared. They were disappointed that Public Service 2431 was locked in a barn and not available for viewing, but a very professional exhibit at the Sprague Memorial Museum Building included a Money Meter identical to the one pictured, on display. If you go to Branford, be sure to look for it. Eventually perhaps, we can get one of these hand-held registers for the proposed Heritage Center in New Jersey. Some members have been collecting and storing various types of fare registers and fare boxes eventually for museum interpretation and display.

If any of you can add to the Public Service "Money meter" story, The Destinations editor would be happy to hear from you. A future article on Public Service fare registers and Fare boxes is being considered.







*Frank Miklos Collection*

**August 4, 1938 marked the last run of the trolleys on the Hudson River Line. Palisades Park continued to be an attraction long after the trolleys were gone.**

*Letters: Knopf - Continued from page 3*

would crank up the wheel as far as it would go. At the floor was a gear with notches in it. There was a small lever on a swivel which would hold the post in place until the switch closed and allowed the car to pass through the crossing. At this time, the motorman would tap the other side of the lever and release the brake. The wheel would start spinning in reverse, sounding like a bucket of nuts and bolts and when it stopped, the car proceeded across the railroad tracks!

Under the destination sign, above the window pane was a bracket or holder about the size of a 3 x 5 index card. From the side, a metal plate with a run number on it could be slipped into the bracket, with the number facing out. On most lines, the plates were usually painted red, with a white number, although there were some with other color combinations. These too, are missing in the 1947 picture.

Referring to the picture again, notice the chain hanging down from the closed door. This indicates the car also been in service on the BLOOMFIELD Line at one time. Sometime after the loop at Penn Station was put into service, all Bloomfield cars ran as single end cars and the rear doors were padlocked to prevent any "free-loaders" from entering through the back door. All cars were operated from the #1 controller, and from the picture, it appears the cars is now running from the rear end.

This may be the reason the line name was blanked out on the roof. It is possible that while running in single end style on the

BLOOMFIELD, the sign was turned to the blank position and never set up for CENTRAL operation. The line rolls shown in the picture were not the original line names that were on the 2600-2700 cars. Apparently, they all wore out with time. The original rolls contained all the main lines operating in the Essex Division crossing Broad and Market Streets. They also included BERGEN, CLIFTON, KINNEY, PATERSON, JERSEY CITY, HARRISON, KEARNY, PORT NEWARK, CLINTON, ROSEVILLE, ELIZABETH and UNION. In addition, each roll had a blank space that was sometimes showing when a car passed by.

One little note about the Rahway car house. From 1956 to 1964, I worked in the composing room at Quinn and Boden, book printers on Elizabeth Avenue in Rahway. On a number of occasions, I would travel up to the center of town. During that period the old car house was used as a sales office for lamps and appliances Public Service sold. In addition, there was a booth where one could pay their electric and gas bills. At that time, there still were two trolley tracks crossing the sidewalk, coming from the parking lot on the side of the building, heading south, converging into a switch in the street, long since gone. The red triangle and blue circle were indeed still prominent on the front of the building.

So much for the musings down memory lane for now. Thought perhaps they might bring some memories back to those who knew the old cars. Thanks so much to all the others who contributed stories and notes to #23 and #24.

Sincerely, George Knopf

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Edgewater hosted car houses of several predecessor companies. The New Jersey and Hudson River Railroad and Ferry Company carhouse was a substantial four track structure considering the sloping real estate.



*Ira Deutsch Collection #442*



*North Jersey Chapter NRHS # 536 - Bob Hooper Collection*

River Road, Edgewater bustled with activity in 1914. Cars 1058, a one manned open, and 3504 waited their departure time.

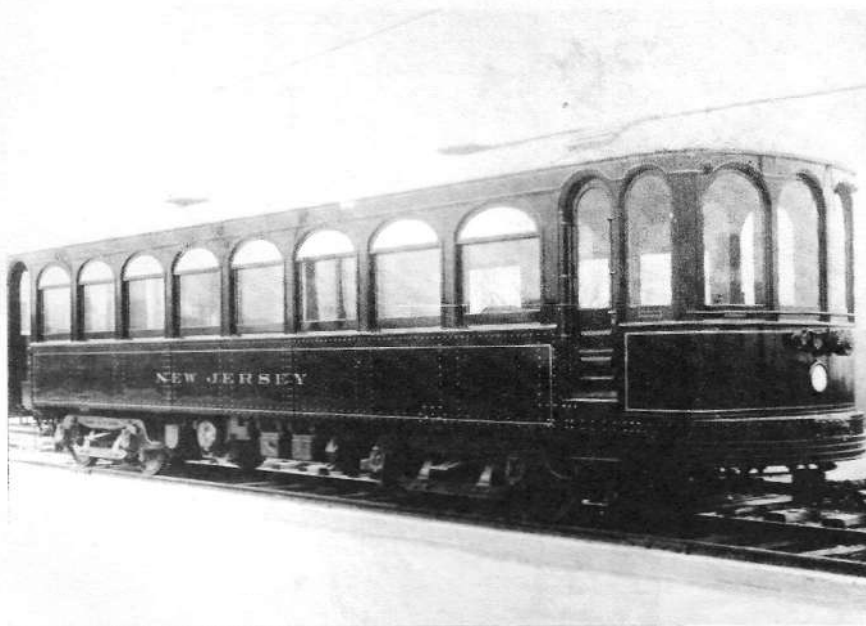


*Ken Roods photo*

### Photos to the Editor:

Ken Roods, Jefferson City, MO writes: Enclosed is a slide that I took at the Plank Road Shops back in 1956 of a trolley converted as an office at the front entrance. I was a young lad in my teens and did not know much about Public Service at the time. I wonder what happened to it, and if the Plank Road Shops are still standing.

Editor's addendum: What young Ken did not know was that he was photographing the private car, New Jersey, masquerading in white and gray as an office. (see photo to the right) I had heard that it survived as the office but had never seen any photos. Thanks, Ken.



*Bob Hooper Collection*

