Broadway Limited Pennsylvania Railroad (PRR)

Peter Donofrio November 21, 2024 NRVMRR Club

NY Penn Station

Built in 1910

7th and 8th street and 31st and 33rd street

21 tracks fed by 7 tunnels

Passenger rails to Boston, Philadelphia, Baltimore, and Washington DC

Commuter service to Long Island Railroad and New Jersey Transit

Connections to NY subway

Demolished in 1963

Reconstituted as smaller underground station

Now beneath Madison Square Garden



Penn Station Interior



Penn Station Clock



Facts about the Broadway Limited

- Initially named the New York and Chicago Limited
- In 1887 changed to Pennsylvania Limited
- 1902 changed to Pennsylvania Special
- 1912 changed Broadway Limited
- Why called the Broadway Limited: the "broadway" referred to the PRR four track right of way along the majority of its route
- Existed from 1912 to 1995
- PRR merged with New York Central in 1968 to become Penn Central
- Penn Central conveyed the train to Amtrak in 1971 to 1995

Facts about Broadway Limited

- Time of the Route:
- Initially 20 hours
- 18 hours by 1932
- 16.5 hours by 1935
- 16.0 hours with advanced steam locomotives and E7 and E8
- Average speed 57 mph
- Prime Movers:
- Atlantics 4-4-2, K4 Pacifics, T1-4-4-4, S1, diesels E7 and E8
- Broadway limited- one of 9 express trains from NYC to Chicago per day

Route of Broadway Limited

Penn Station

Newark

North Philadelphia

Paoli

Harrisburg

Altoona

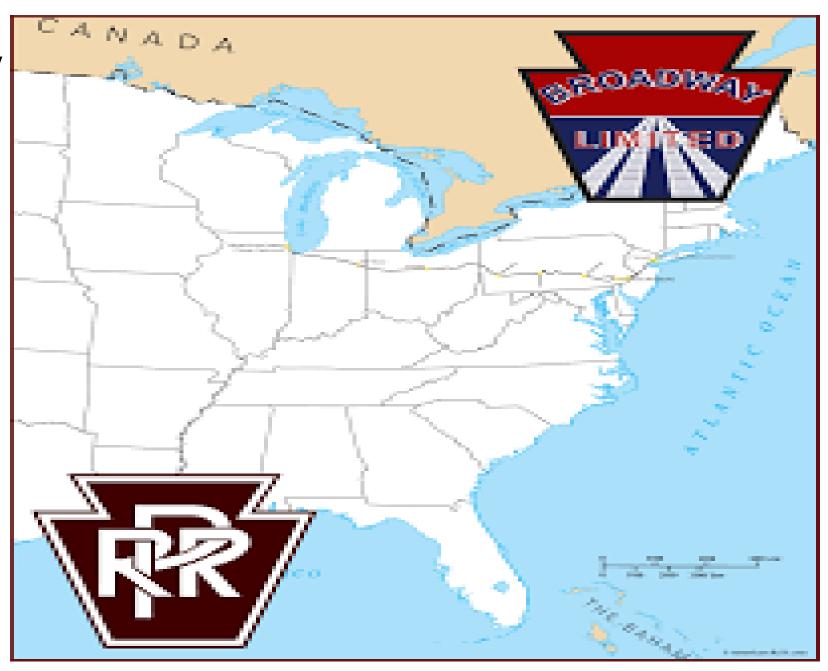
Pittsburgh

Crestline, Ohio

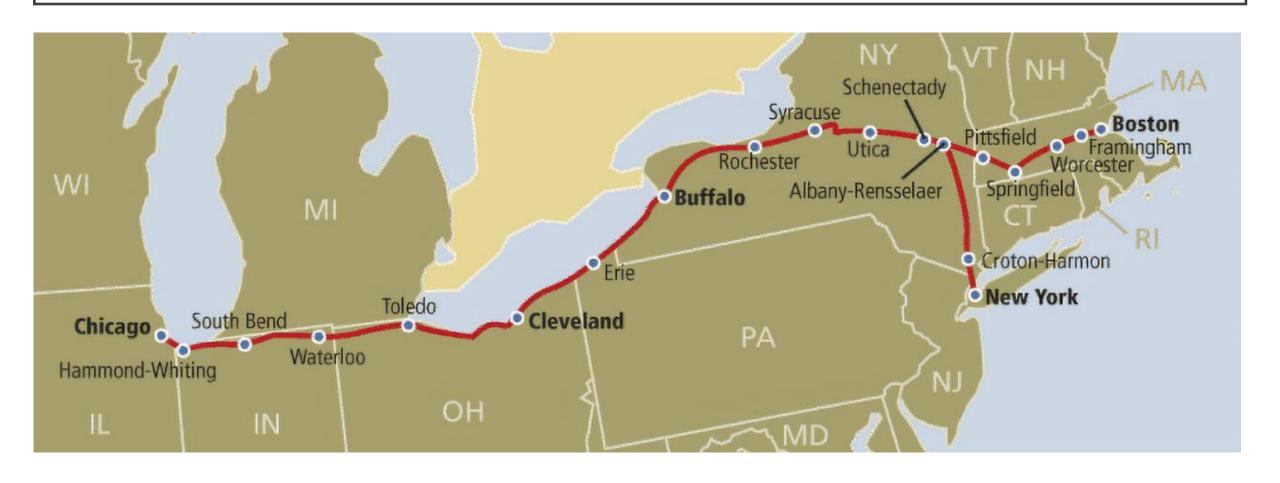
Fort Wayne, Indiana

Englewood, Illinois

Chicago Union Station



Route of 20th Century Limited



Why called the Broadway Limited



PRR four track right of way along the majority of its route

Facts about the Broadway Limited

- Broadway limited ran daily
- 907.7 miles from Penn Station to Union Station Chicago
- Departed Penn Station at 2:55 pm ET
- All Pullman cars, Roomettes and double roomettes
- 14 cars (baggage car, 9 sleepers, 2 diners, lounge car, observation car.
- Converted to lightweight cars in 1938, the same day that NYC converted the 20th Century Limited to lightweights.

Broadway Limited Special Services

- Telegraph Use
- Stationery
- National newspapers
- Stock quotes
- Baseball Scores
- Barber including shaves
- Baths
- Clothing pressing
- Ladies maid
- Facial messages
- Hair tinging

PRR Prime Movers

Atlantic Locomotives

4-4-2 wheel arrangement, 80" drive wheels

Used 1899 to 1920s

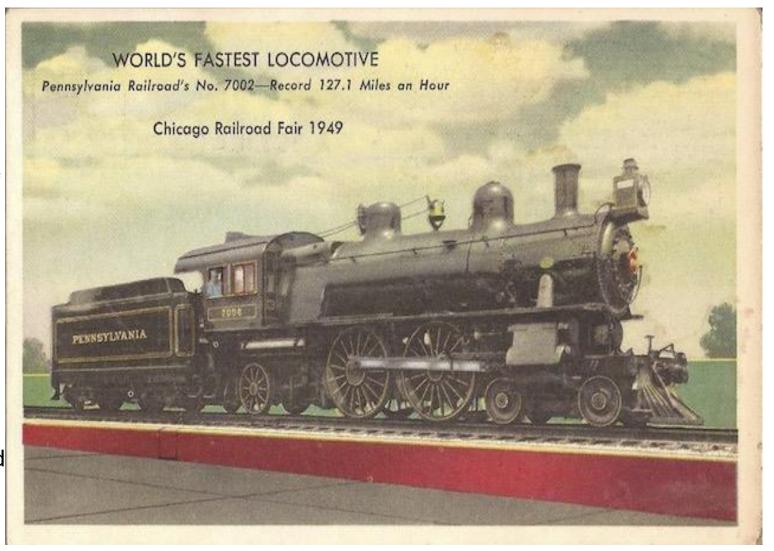
E1 through E7 models

E6 most popular with engineers because of smooth ride, low vibration and speed

Total 601 units built, most made at the Juanita shops in Altoona

Maximum speech 127 mph clocked at Crestline, Ohio

Pulled up to 13 passenger cars



K4 Pacifics

First built in 1914

425 built at Juanita plant, Baldwin shop in Philadelphia

First utilized in the 1920s

K4s considered one of the finest steam engines.

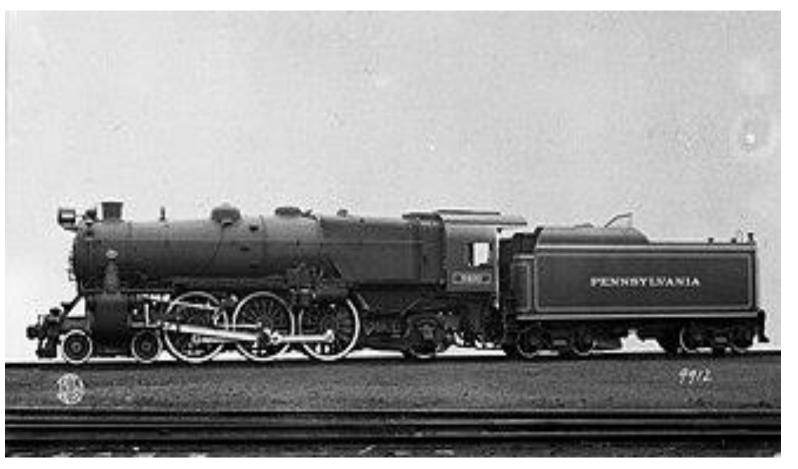
80 inch drivers

"An Engine among engines"

Average speed 60-75 mph

Maximum speech 98 mpg

Shrouded engines introduced laternuisance to maintain



Streamlined K4s.

Popular with the passengers because of streamlined aesthetics

Unpopular with mechanics

Eventually, all shrouds removed as they limited access to servicing

Designed by Raymond Loewy



T-1 4-4-4

First introduced in 1942.

52 units made, ½ in Altoona and ½ at Baldwin plant in Philadelphia

80 inch drivers, weighed 500,000 lbs

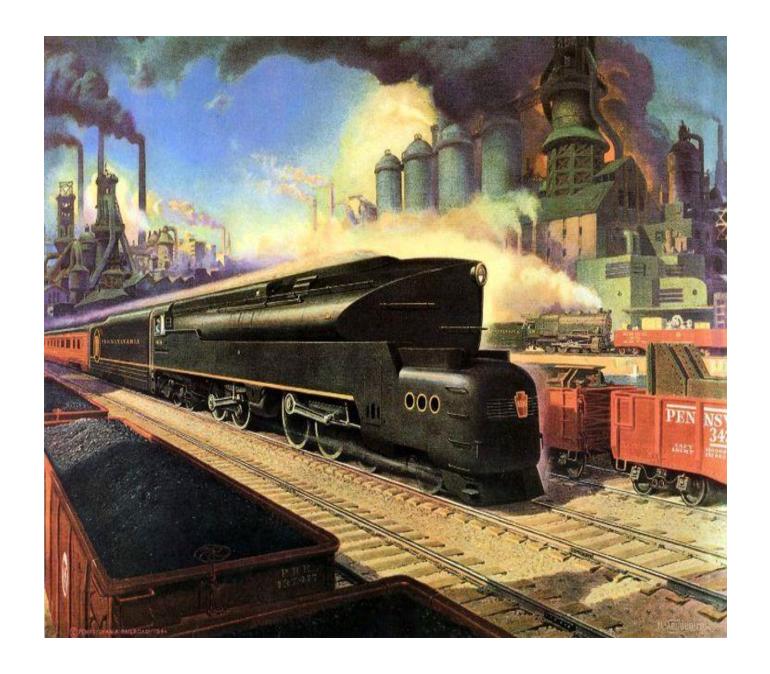
Aesthetically popular with customers.

Designed by Loewy. Considered one of the handsomeness steam locomotives.

Major problems with slippage on grades, high maintenance costs, expensive to service.

Replaced by 1948 with E7, E8 diesel.

Horsepower 6552, top speed 102 mph



Other prime movers for the Broadway Limited

S1 Duplex 6-4-4-6. Made in Altoona 1939. Only used between Crestline, Ohio and Chicago

Only 1 made

Q1 Duplex 4-6-4-4. Freight trains, Made in Altoona

S2 Turbine Engine. 6-8-6 Made in Philadelphia

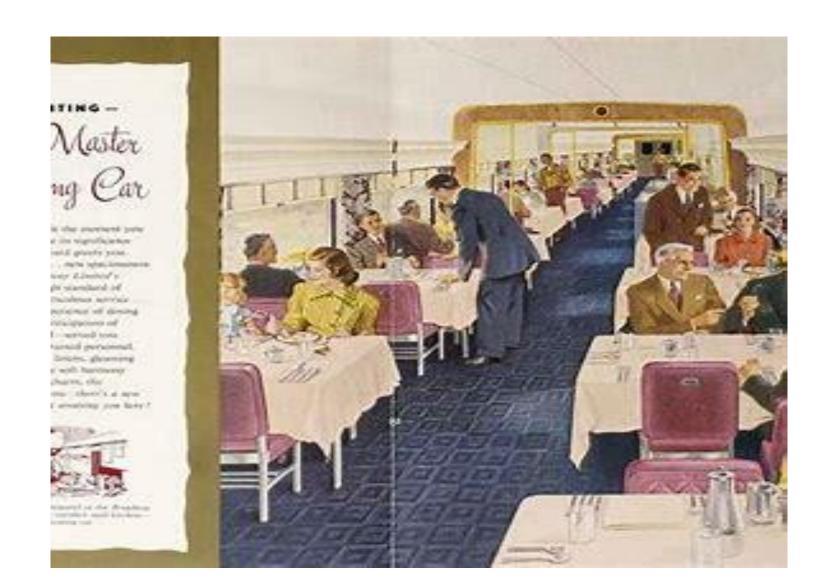
All of the above were too expensive to run and service compared to diesels.



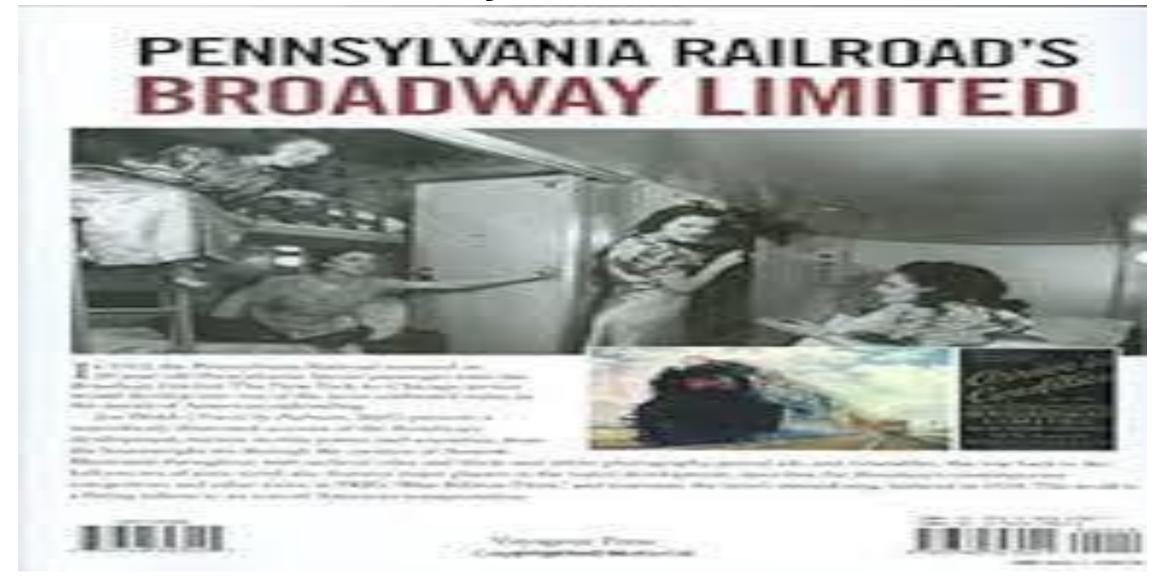
Amtrack Broadway Limited 1971 to 1995



Broadway Limited Dinning Car



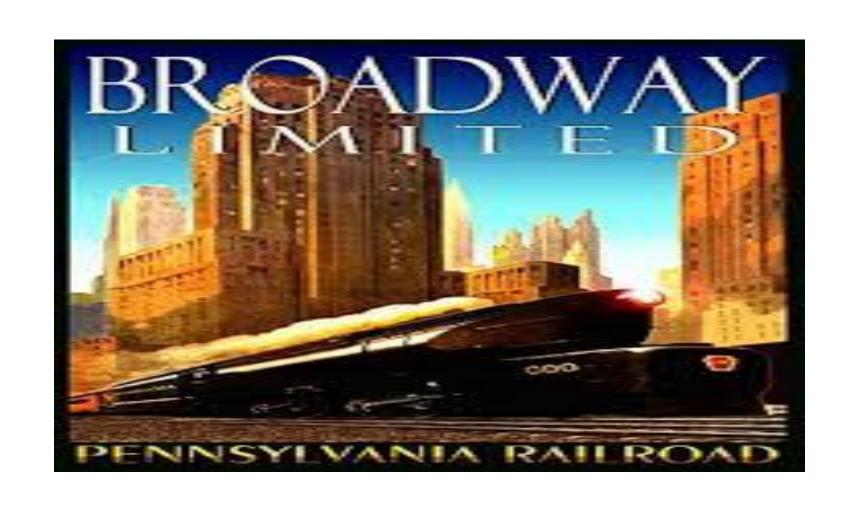
Broadway Limited Pullman Car



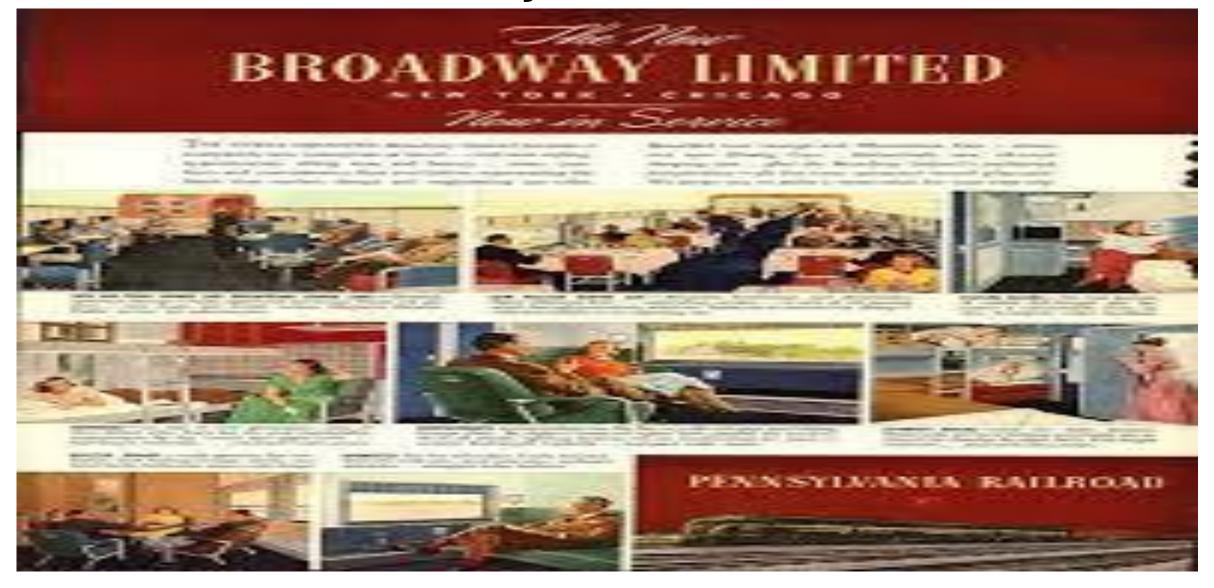
Broadway Limited Painting



Broadway Limited Poster T1



Broadway Limited Posters



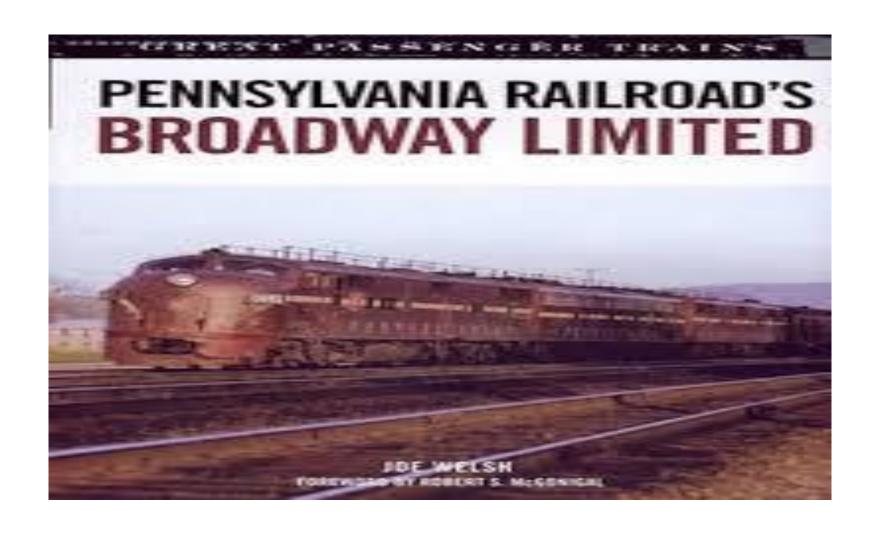
Broadway Limited Poster



Broadway Limited vs. @20th Century Limited



Broadway Limited Diesels



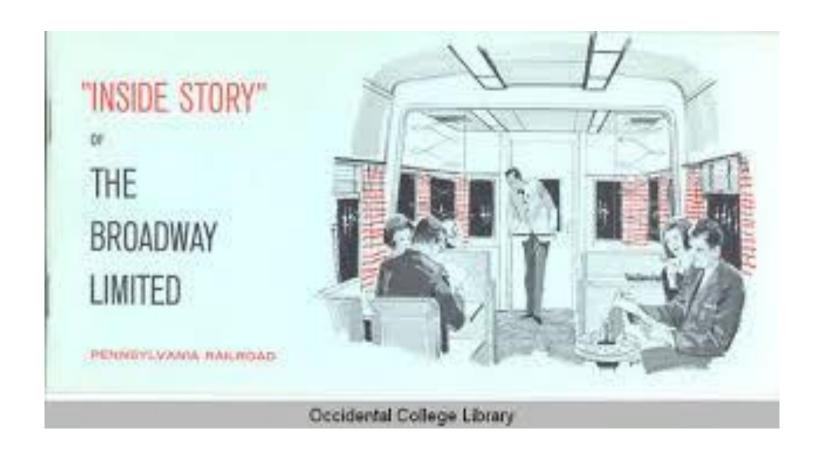
Broadway Limited GG1 Electric Engine



Broadway Limited Observation Car



Broadway Limited Observation Car



Postage Stamp of Broadway Limited



Broadway Limited Poster



Broadway Limited China



Broadway Limited Pocket Watch



Broadway Limited Summary

- Express train from New York to Chicago, and back
- In direct competition to the 20th Century Limited of NYC
- Existed 1912 to 1995
- Received its name in 1912
- Left Penn Station at 2:55 pm ET.
- Travel time 16.00 hours. 907 miles
- Prime movers were Atlantics, K4 Pacifics, T1, and E8-9s