Executive Summary

Port Jervis Line Service Strategy Report

January 2018
Introduction

This study explores potential strategies to improve the attractiveness of Metro-North’s Port Jervis Line (PJL) service for existing and potential customers. The study determined that the most viable strategy for the short to mid-term (next 5-10 years) is to increase service frequency and to introduce reverse peak service through the construction of three new passing sidings and a new rail yard located mid-point along the Line in Campbell Hall, NY.

Background

Metro-North’s Port Jervis Line (PJL) is a 65-mile rail line providing commuter rail service primarily in Orange County, New York. Running from Port Jervis to Suffern in New York State, the line operates with limited stops in New Jersey, sharing the remaining 30 miles of right-of-way (ROW) with NJ TRANSIT’s Main-Bergen County Line service into Hoboken Terminal. Service to and from Manhattan is available by transfer. Metro-North contracts with NJ TRANSIT to operate the trains between Hoboken Terminal and Port Jervis Station, a total distance of approximately 95 miles. Currently, there are 27 weekday trains on the Line and 14 trains on each weekend day.

Ridership and the Need for Enhanced Service

Manhattan is the primary out-of-county destination for Orange County workers. Socioeconomic and demographic projections suggest the potential for substantial ridership growth on the PJL. PJL ridership doubled from 1984 to 2008, with the most substantive growth occurring after 2003. However, after peaking at over 1.5 million in 2008, a sustained drop in ridership occurred due to the impacts of the Great Recession, followed by Hurricane Irene in 2011, and Tropical Storm Sandy in 2012. Hurricane Irene was particularly devastating to the PJL’s infrastructure and led to a three-month service suspension. Recent ridership rebounds have been tempered by a derailment incident in 2016 at Hoboken Terminal, leading to a 10-day service suspension. As a result of these incidents, many Metro-North customers began seeking other modes of travel between Orange County and Manhattan.

Study Methodology – Alternative Strategies to Improve Attractiveness of PJL Service

In developing the PJL service strategy, consideration was given to the following strategies that could offer a more appealing service:

- Improving travel times
- Providing a one-seat ride to Manhattan
- Increasing service frequencies

Improving travel times and providing a one-seat ride are extremely difficult to implement in the short to medium-term and have significantly greater costs and potential extensive environmental impacts. Improving travel times necessitates realigning sharp curves on the PJL to increase speeds, a strategy with substantial costs and significant environmental impacts. Providing a one-seat ride to Manhattan requires construction of the new Hudson River Tunnel to Penn Station, the expansion of the number of platforms and tracks at Penn Station, and a new connection between the Northeast Corridor and the Main-Bergen County Line/PJL. While this is an alternative long-term goal, these improvements are costly megaprojects and may have sufficient environmental impacts.

Although there are capacity improvements associated with increasing service frequencies (discussed below), their construction and environmental impacts are potentially minimal when compared to either improving travel times or providing a one-seat ride to Manhattan. The strategy to increase PJL service
Proposed Service Strategy

The proposed PJL service strategy will provide an "Inner" PJL service that will benefit most of the PJL customers by providing the additional service at the Middletown/Town of Wallkill Station and stations located to its east. The rationale for using this location as a terminus of the "Inner" PJL service are:

- Approximately 94% of PJL AM Peak customers board at the Middletown/Town of Wallkill Station or stations to the east and a large portion of Orange County residents live east of Middletown.
- The Middletown/Town of Wallkill Station is located at Milepost 72, covering approximately 60% of track miles along the Line in Orange County.
- The Middletown/Town of Wallkill Station is located at the junction of two major highways, Route 17 and I-84, providing easy access to the station.

Under this proposal, service will grow from the current weekday service to as many as 44 trains and weekend service up to 26 trains per weekend day. The majority of these additional trains will operate solely on the "Inner" PJL. These additional services would not only benefit Orange County residents, but also Rockland County residents who use the PJL. The capital investments needed to advance the new "Inner" PJL service will include right-of-way improvements and a new overnight train storage and service yard mid-point along the Line (Mid-Point Yard).

PJL Right-of-Way Improvements

The PJL is mostly a one-way railroad with few passing sidings. This makes it difficult to operate a reverse peak service and a more robust two-way operation during the off-peak. Therefore, Metro-North evaluated adding capacity on the Line. Extending the current two-track system 20 miles from Sloatsburg to just south of the Moodna Viaduct was compared to constructing new passing sidings, each approximately one to two miles long. Analysis indicated that the construction of passing sidings is a more cost-effective solution for short/mid-term implementation for the following reasons:

- Adding either double tracking or passing sidings to the PJL can accommodate the desired service during the off-peak period and weekends and allow for reverse peak service
- The estimated construction costs ($2012) for the passing sidings ($54M - $72M) would be substantially less than for double tracking ($334M), more than off-setting the greater benefits of the double-tracking

Although not recommended for the short/mid-term future, double tracking could be considered in the longer-term if increased demand requires markedly higher service levels.

Mid-Point Yard

To allow for service growth, a conceptual plan was developed for a Mid-Point Yard that could provide overnight storage and servicing, including fueling for up to eight trains. An initial list of 40 sites was first narrowed to 10 sites in three geographical zones and then further narrowed down to the sites in each zone that represented the least risk. The three zones were associated with the Harriman, Salisbury Mills, and Campbell Hall Stations. These sites were further evaluated based on environmental issues, operating service, and construction costs.

Based upon the evaluation, the Campbell Hall site appears to be the best alternative site for a Mid-Point Yard. Located closest to the Middletown/Town of Wallkill Station and requiring the least train
deadheading miles of the three alternatives (running trains in non-revenue service between terminals and a yard).

The Harriman Mid-Point Yard alternative would require the most deadheading to support Middletown/Town of Wallkill service and, as a result, minimizing the risk of unforeseen circumstances while deadheading. Another important concern is that the Harriman site is zoned for Transit Oriented Development and is being actively marketed as such to real estate developers by local elected officials.

The Salisbury Mills alternative would trigger the greatest environmental impacts and require the highest capital investment compared to the other two locations due to both its proximity to residential development and its topographical limitations.

Conclusion

Metro-North staff and the consultant team have recommended moving forward on the next steps toward advancing a service strategy that provides an “Inner” PJL service operating from the Middletown/Town of Wallkill Station. The service will be supported by the construction of new passing sidings and the construction of a Mid-Point Yard at Campbell Hall.

The next stage of this effort will involve an engineering study for the passing sidings to confirm locations and costs, further development of the Mid-Point Yard, and the initiation of environmental reviews for both. Approximately $26 million for this work is included in the MTA Capital Program.