

Regional **Plan** Association  
NJ CT  
NY

# THE CASE FOR A NEW HUDSON RIVER PASSENGER RAIL TUNNEL INTO MANHATTAN

**EXECUTIVE SUMMARY**  
**DECEMBER 2003**

# OVERVIEW

The report that follows presents Regional Plan Association views regarding a proposed new rail passenger tunnel under the Hudson River to midtown Manhattan, known as Access to the Region's Core (ARC). The release of this report coincides with the public scoping hearings on the Draft Environmental Impact Statement (DEIS) sponsored by NJ TRANSIT and the Port Authority of New York and New Jersey to take place on December 8 and 10. RPA strongly supports the construction of a new tunnel. It is vital to provide the capacity for economic growth in the Region, along with East Side Access for the Long Island Railroad and a full-length Second Avenue Subway. These projects must be our top priorities.

ARC's value to both New York and New Jersey and to the travelers between the two states is documented in our report. We further believe that the value of the tunnel would be greatly expanded if the tunnel were to directly serve riders seeking to reach all of Midtown Manhattan, especially the east side. RPA has described a way to achieve this important objective – a rail loop with four or more stations in Manhattan – and is respectfully asking the two agencies to fully examine the concept at a level of detail equal to the examination of the other alternatives they are planning to examine in the DEIS. To do less would severely short-change the citizens and the economy of both states.

## EXECUTIVE SUMMARY

### I. An Impending Capacity Crisis

Most of the transportation capacity to meet the enormous travel needs of our tri-state metropolitan Region was created long ago. Almost the entire rapid transit system – the New York City subway system and PATH connecting New Jersey and Manhattan – was built between 1904 and 1940, and little new capacity has been created since. In fact, since 1937 the New York City subway system has shrunk by about 20 percent. The rail tunnels that bring the commuter rail network into Manhattan's Central Business District (CBD) under Park Avenue and the East and Hudson rivers date from the early 20th Century. The highway network, which had been expanding at a rate of 54 miles per year from 1951 to 1974, has barely grown since.

The absence of added transportation capacity into the core of the Region, particularly from the west, is becoming a serious problem, with very little capacity being added to accommodate the rapid growth in travel from that sector. The peak period capacity at the Lincoln and Holland tunnels has long ago been reached, and it is neither practical nor desirable to build another vehicular crossing. And while it is true that ferry expansion offers some possibilities for added trans-Hudson capacity growth, most of the viable trans-Hudson markets have already been exploited. Meanwhile, travel demand across the Hudson has been steadily increas-

ing. Since 1980, the number of daily trips into the CBD from the west has grown by 64 percent, while the growth from all other directions has been only 25 percent.

Expanded MidTown Direct service and the opening of the Montclair Connection have increased demand in recent years. The result has been that the share of suburban commuters from the west has grown from 45.6 percent to more than half (52.7 percent). The impending opening of the Secaucus Junction in the next month will expand it still further. These projects are testing the ability of the railroad network to accommodate the number of passengers wishing to use Penn Station. NJ TRANSIT forecasts that rail traffic volumes will reach capacity in 2009.

### II. The Regional Economy Relies on Trans-Hudson Travel

A large portion of both New York's and New Jersey's economies are dependent on travel across the Hudson River. The wages alone of people commuting from West of the Hudson River to Manhattan accounts for approximately \$35 billion, or about 7% of all wages earned in the metropolitan region. However, the value of the Trans-Hudson travel market extends far beyond these earnings. Trans-Hudson workers to Manhattan support approximately \$70 billion of New York City's economic output. This represents about 15% of the Gross City Product in 2000.

For New Jersey (and the New York counties that are west of the Hudson and represent 10% of Trans-Hudson commuters), it also includes the economic impacts these earnings have in the home communities of these workers. The last three decades of job decentralization in the tri-state region have obscured the fact that Manhattan remains the dominant source of wealth generation in the region. Manhattan's offices, stores and restaurants are an enormous market for regional firms selling everything from printing to health insurance to consulting services. The island also acts as an incubator for firms that originate in the CBD but either relocate or expand to other parts of the region.

Midtown remains the leading driver of economic activity. While Midtown's continued attractiveness for global office activities cannot be taken for granted, its existing concentration of businesses and 24-hour amenities and its access to one of the world's largest and most talented labor pools puts it in a strong position to benefit from an expanding global economy. And although the core of Midtown is densely developed, there are opportunities for more than 50 million square feet of additional office space through infill and expansion westward. This includes almost 10 million square feet of new construction in the pipeline, including the AOL Time Warner building at Columbus Circle and the planned Bank of America building on Sixth Avenue. Therefore, the development capacity exists to support at

least another 200,000 office workers in Midtown and as many as 60,000 Downtown.

The most important reason for Manhattan's success is its access to a regional labor force that is unique in its combination of size, talent and diversity. This is particularly true of Midtown, which contains the primary hubs for both city subway lines and commuter rail lines from the north, east and west. Access from west of the Hudson is especially important, as the growth in Manhattan's workforce has come almost entirely from these suburban areas. From 1980 to 2000, 74% of all net new Manhattan jobs were filled by workers who lived west of the Hudson River. This represents 76,000 additional commuters and resulted in its share of Manhattan's workforce increasing from 10.3% to 13.5%. The suburban areas east of the Hudson remained largely stable at just over 12%. Although all parts of the region are facing a shrinking amount of developable land, west of Hudson is least constrained.

West-of-Hudson residents contribute to the New York economy as consumers as well as workers. Every New Jersey resident who takes in a Broadway show, shops on Fifth Avenue or frequents Manhattan clubs or restaurants supports one of the city's most important economic sectors. A 1997 study by the Alliance for the Arts estimated that the total economic impact of New York City nonprofit cultural organizations, commercial theater, art galleries and motion picture and television production generated \$11.1 billion in economic activity, 130,000 jobs and \$221 million in tax revenue in the city in 1995. These numbers have almost certainly expanded substantially since then. They also do not include spending on restaurants, retail and entertainment that are unrelated to the arts.

### **III. A New Tunnel is Vital to Achieve Expected Economic Growth**

Adding a new two-track tunnel into Midtown Manhattan, as proposed by ARC, would effectively double the rail capacity into Midtown from the west, and it has other major advantages as well. It could double the frequency of service on existing lines, make it possible to operate more lines with one-seat rides into Penn Station and add service on new or re-instituted rail lines that have been long discussed. An added tunnel would also prevent the degradation of reliability likely to take place when demand approaches capacity, and if designed properly, build in redundancy to a rail system during routine maintenance and renovation of the existing tunnel or in the event of an emergency.

To their credit, the three major transit agencies in the Region – the Metropolitan Transportation Authority (MTA), the Port Authority of New York and New Jersey, and NJ TRANSIT – recognized the problem described in this report as early as 1990. Their work, known as Access to the Region's Core (ARC), finally began in 1994. In addition to the objective of gaining more capacity across the Hudson,

another key objective was to devise a means to allow commuters from west of the Hudson to reach the east side of midtown Manhattan, where the vast majority of commuters worked. The location of Penn Station has the effect of forcing a strong majority of commuters arriving in Penn Station who are destined to locations beyond reasonable walking distance, primarily on the east side, to either transfer to another transit mode or endure an excessively long walk.

ARC examined many alternatives and eventually centered its attention on three. However, the only one of these three that would enable passengers to reach the east side directly would require rail operations into the MTA's Grand Central Terminal. The MTA vetoed this option, arguing that it would adversely affect their Metro North and LIRR operations and that it required the southbound Lexington Avenue subway local track to be moved. Neither of the remaining two options would deliver people to the east side.

One option, known as "P," would build a new stub-end terminal under the existing Penn Station, requiring a long climb from this deep terminal. The other, known as "S," would extend the station tracks and platforms on the south side of the existing Penn Station and then operate empty trains eastward to Queens where they would be stored in Sunnyside Yard in Long Island City.

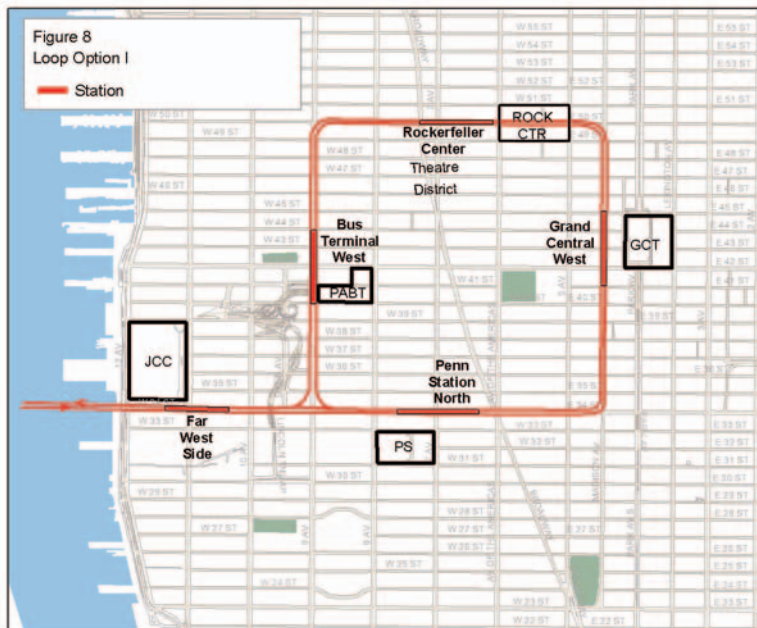
### **IV. The RPA Loop Alternative: Access to the East Side and Far West Side**

Regional Plan Association recognized the limitations of the two remaining alternatives developed by ARC. Consequently, RPA set out to find another solution to the problem. Any solution should, in addition to adding peak hour capacity, simultaneously address five issues:

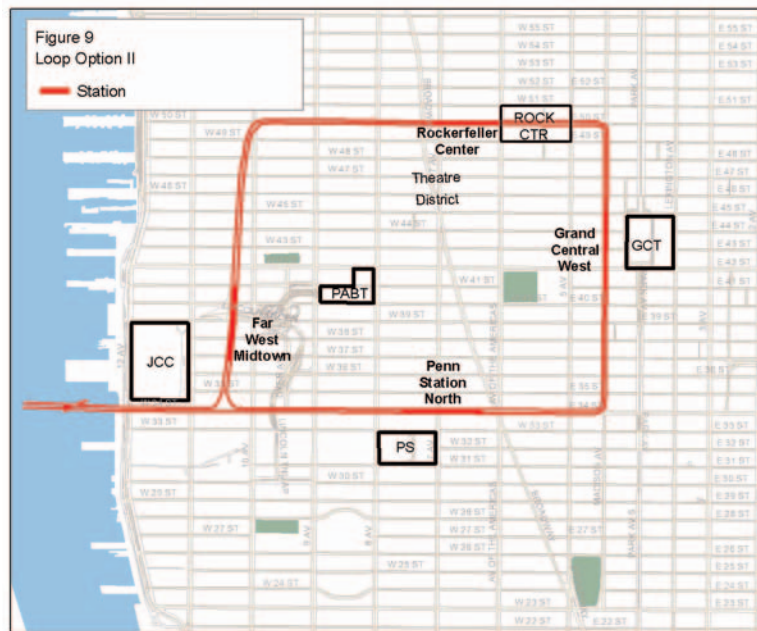
1. Serve the large east side market significantly better than the rail service into Penn Station does today;
2. Provide for train storage in a way that avoids excessive "dead-heading" to remote and expensive sites (unlike ARC's "S" alternative);
3. Avoid operations into Grand Central Terminal, which would be opposed by the MTA as they have in the past;
4. Provide for easy access to the street surface near the many subway stations in Midtown; and
5. Given the post-9/11 climate, operate separately from the existing system, so that in the event of a loss of either the existing tunnel or new tunnel, or of an event in Penn Station or a new station, or even routine maintenance, the rail system can continue to operate effectively and flexibly.

The Loop. Each of these problems is overcome by RPA's loop concept, illustrated in two forms below. Commuter trains would enter Manhattan through a separate two-track

**Figure 8**



**Figure 9**



tunnel (same as all the ARC concepts). Under this concept, the inbound set of tracks would split into two sets of tracks as it approached the first stop sited under 34th Street and centered on Seventh Avenue. This location would optimize transfers to the eight subway services under Eighth, Seventh and Sixth avenues and Broadway, and to PATH. The two-track configuration would continue under 34th Street and turn north under Madison Avenue, with trains stopping in the mid-40s to facilitate a short walk to Grand

Central Terminal and to the Lexington Avenue and Flushing subway lines. The commuter rail tunnel would continue north and then turn west under 50th Street (or possibly 49th or 51st), with the next station located with its east end at Sixth Avenue and Rockefeller Center and its west end near Broadway or Seventh Avenue, providing for easy transfers to the Seventh Avenue and Broadway subway lines. The line would continue west, turning south under either Ninth Avenue or the existing railroad cut between Tenth and Eleventh Avenues, serving the proposed development on the west side. The Ninth Avenue version could add a fifth stop, located near the proposed multi-use facility over the Hudson Yards. Another advantage of the Ninth Avenue alternative would be the emergency capability to switch from bus to rail or rail to bus in the event one of the two modes is out of service. The other version would have one station, somewhat more centrally located for west side development at about 38th Street.

The loop concept would provide for about 25 peak hour trains under the Hudson with the trains alternately using the two sets of tracks, allowing time for disembarking and clearing of the platform before the next train opens its doors. In the off-peak, one set of tracks could be operated clockwise, giving the line a circulation capability in Midtown in both directions of the loop.

**V. Scoping and the Draft Environmental Impact Statement**

The scoping process that initiates an Environmental Impact Statement is intended to provide all parties the opportunity to comment on the shape, scope and range of alternatives that are to be examined in the environmental impact process. Accordingly, Regional Plan Association has presented the loop concept that extends a new tunnel eastward in midtown Manhattan as described above for the purpose of requesting that NJ TRANSIT and the Port Authority fully examine the concept at a level of detail equal to the examination of all other alternatives that are to be examined

in the DEIS, including “P” and “S” and any modifications of them.

This request should not be viewed as a lack of support by RPA for a new tunnel. On the contrary, RPA believes that the construction of a new tunnel is essential. If constructed under 34th Street the tunnel would then be extended eastward as part of the loop. However, to stop short of extending the tunnel to the east side would shortchange both New Jersey and New York.