



NEW YORK-WASHINGTON 220-MPH RAIL SERVICE



TEMS

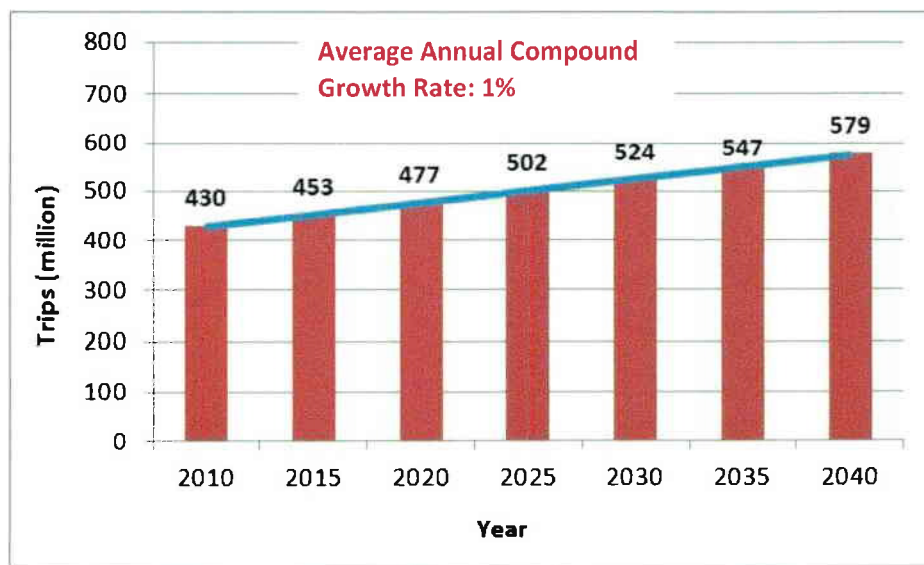
Transportation Economics &
Management Systems, Inc.

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1. INTRODUCTION

The New York-Washington travel market is expected to grow from 430 million trips in 2010 to 580 million in 2040, an increase of 35 percent based on expected socioeconomic growth in the corridor. See Exhibit 1.

Exhibit 1: Growth in the Washington DC-New York Corridor



This increase in traffic will occur at a time when existing facilities are reaching capacity and it is likely that fuel prices will increase significantly to 4 dollars a gallon and possibly as high as 5 dollars a gallon by 2040 according to Energy Information Agency (EIA). At the same time highway traffic congestion according to state forecasts and MPO's will increase travel time by auto from 4 hours and 10 minutes to 5 hours and 50 minutes or by 40 percent. These energy and highway congestion increases will disadvantage air and auto travel, and rail travel will become more competitive.



2. A 220-MPH OPTION

If a new 220-mph rail option were built in the corridor (See Exhibit 2), it could provide a 1 hour 30 minute service between Washington, DC and New York, the rail market could grow from 12 million trips in 2010 to 35-37 million in 2020 and 44-47 million in 2035 (See Exhibit 3).

Exhibit 2: Growth in Corridor Travel Market

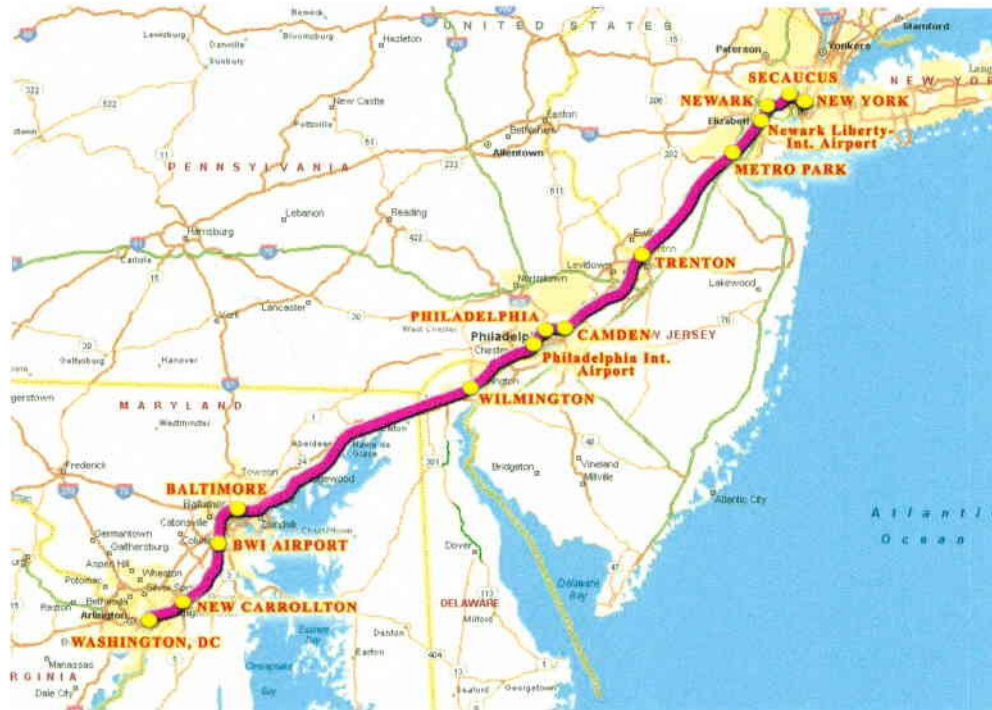
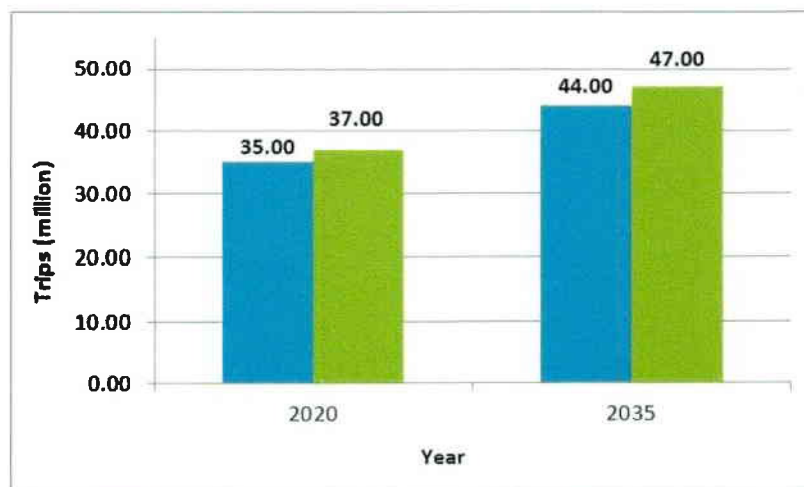
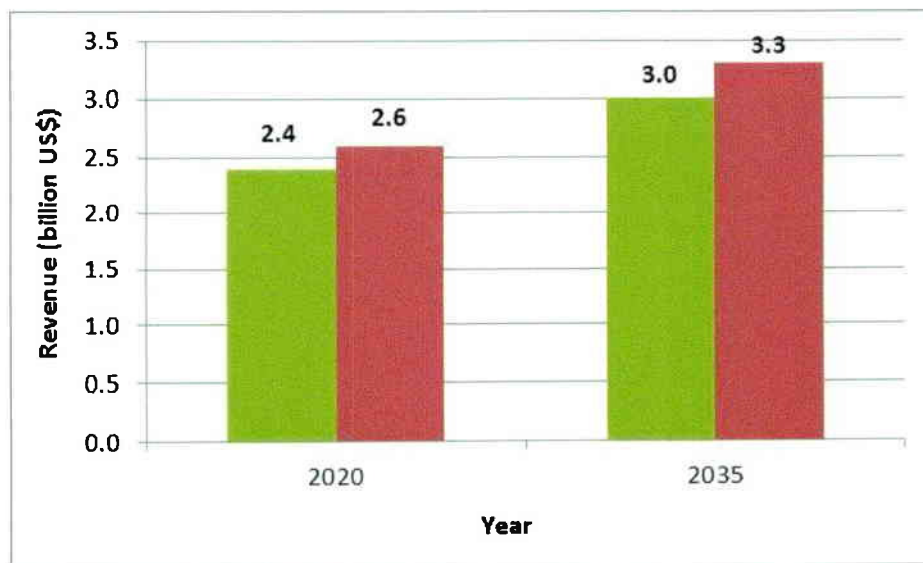


Exhibit 3: 2020 and 2035 Forecast Ridership (Millions)



With an average fare of 80¢ per mile compared to the current Amtrak average fare of 60¢ per mile, the ridership would generate revenue of \$2.4 to \$2.6 Billion per year in 2020 and \$3.0 – \$3.3 Billion in 2035 (See Exhibit 4).

Exhibit 4: 2020 and 2035 Forecast Revenue (Billions)



The intercity rail service would obtain between 8 and 10 percent of the market, with 35 percent of trips being for business, 15 percent commuter and 50 percent for social, personal and tourist purposes. In terms of the source of rail trips, 60-70 percent of the trips would be diverted from auto, 5 percent from bus and air.



3. THE COST OF THE PROJECT

Detail studies of a 220-mph service suggest that a new route would cost \$35 Billion at an average cost of \$160 Million per mile. The route would largely follow the existing Northeast Corridor route and even share right-of-way locations but would adopt a 15 minute curve standard that would necessitate leaving the existing route in a number of places to avoid the very bad curves in the existing right-of-way. In some areas new greenfield diversions would be needed. Overall, 8.9 percent of the route would be tunnels and 50 percent of the route would be outside the existing Northeast Corridor right-of-way. To operate the system some 22 new trains would be required to provide a 15 minute service across the day. The operating costs for the system would be \$780 Million – \$820 Million in 2020 rising up to \$960 Million to \$1 Billion per year in 2035.

4. FINANCIAL AND ECONOMIC RESULTS

The New York – Washington Corridor is the highest ranking corridor in the US and is the only corridor that could be developed without or only limited government funds.

The operating ratio for the 220-mph rail system is 3.46 – 3.50 with an Operating Surplus over 30 years of \$37 – \$39 Billion. As such, the corridor provides an operating cash flow that can pay back the \$35 Billion capital cost from the fare box. If additional revenues can be developed for the project from joint Development and Transit Oriented Development (TOD) at stations, the project could be self-financing.

The demandside Economic Benefits of the project produces a Cost Benefit ratio of 1.8 – 2.0 at 3 percent discount rate and a 1.2 – 1.3 at a 7 percent discount rate. This meets the USDOT FRA funding requirement.

5. CONCLUSION

As a result, the New York – Washington Corridor is a strong candidate for Public-Private Partnership (P3) project that could be developed as a Build, Own, Operate, Transfer and Finance (BOOT-F) project.