



Lincoln Tunnel Exclusive Bus Lane Enhancement Study

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March 2005

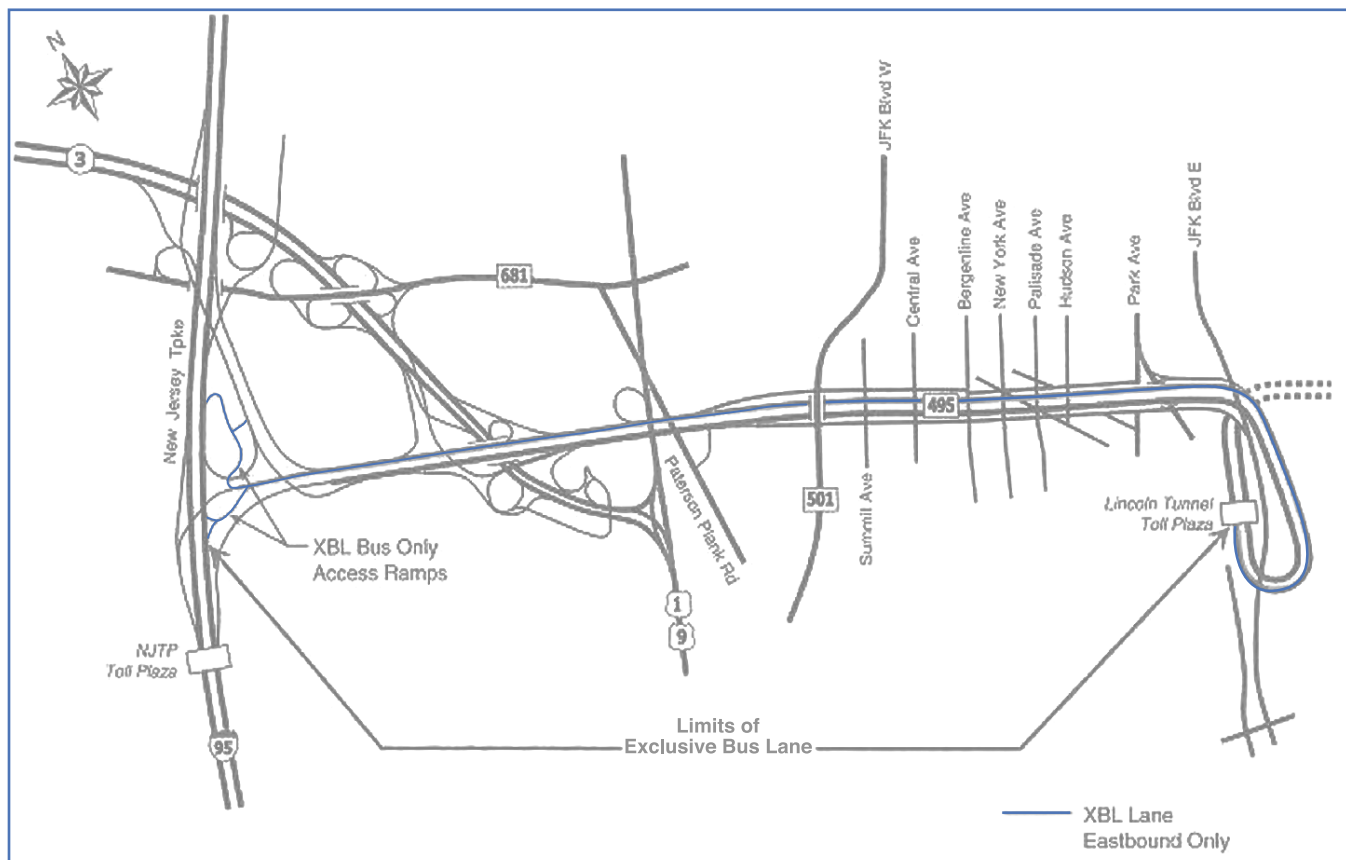
THE PORT AUTHORITY OF NY & NJ

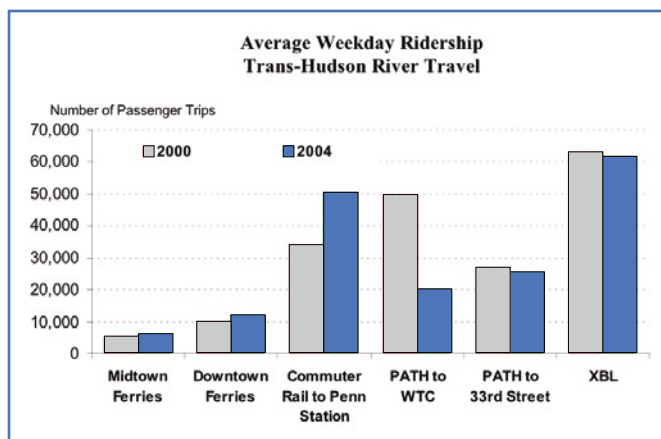
The Exclusive Bus Lane (XBL): Making The Lincoln Tunnel A Mass Transit Facility

Have you ever traveled on a weekday morning along NJ Route 495 heading toward Weehawken, Hoboken, or the Lincoln Tunnel and wondered, "Why are those buses traveling eastbound in a westbound lane?" Those buses are traveling in an Exclusive Bus Lane (XBL), which extends for two and one-half miles along Route 495 between the New Jersey Turnpike and Route 3, and the Lincoln Tunnel. The XBL operates as a "contra-flow lane" allowing eastbound bus traffic on Route 495 to travel in a westbound lane. The XBL is separated from the oncoming traffic by 560 cylindrical traffic delineators that are manually inserted into predrilled holes along the length of the bus lane every morning. In addition, overhead signs and directional signals notify motorists of the status of the lane and which lanes are available for general traffic and which lane is dedicated solely for buses.

The XBL is a cooperative effort of three agencies: The Port Authority of New York and New Jersey (PANYNJ), the New Jersey Department of Transportation (NJDOT), and the New Jersey Turnpike Authority. The lane is operated under an agreement between these agencies, which assigns responsibility to the Port Authority for the daily operation of the lane, the maintenance of all the electronic signs pertaining to the XBL, and emergency response to incidents that occur during its operation. The lane has been operated under this agreement since 1971, and has served more than 450 million passenger on nearly 12 million buses through its 33-year history.

The XBL is by far the busiest and most productive bus lane in the nation. The lane operates weekday mornings between 6:15 and 10:00 a.m., accommodating approximately 1,700 buses and 62,000 commuters daily. Over the course of a year, this amounts to nearly 425,000 buses carrying over 15 million passengers annually. In linking





the NJ Turnpike, North Bergen Park & Ride Lot, and NJ Route 3 with the Lincoln Tunnel, and then directly to the Port Authority Bus Terminal in Midtown Manhattan, the XBL truly makes the Lincoln Tunnel a mass transit facility each weekday morning. As a matter of fact, the XBL handles more trans-Hudson commuter trips to Midtown Manhattan each day than any other mode including PATH, ferries, and even commuter rail into Penn Station.

The Limited Capacity of the Single Lane XBL: An Urgent Congestion Challenge

The timesaving the XBL offers bus riders is the primary benefit contributing to its overwhelming popularity. On average, the bus passengers in the XBL save from 15 to 20 minutes in commuting time during the morning rush hour, compared with customers that use the regular traffic lanes of Route 495. Since its inception in 1971, the XBL had enjoyed significant growth through the late 1980s. After that time, the growth has continued at a more moderate rate. The slowing growth rate of XBL reflects that fact that the capacity of the single lane can no longer



View of NJ Route 495 With the XBL in Operation

accommodate more buses in the peak hour. The continued growth in the XBL has been evident by more buses traveling outside the peak hour, placing the single lane at its capacity level for a longer period of time during the 6:15 – 10:00 a.m. operation.

In many respects, the XBL is a victim of its own success. Commuting by bus via the XBL has become so popular that the lane is nearly full. With the XBL at or near capacity, the operation has been subject to periodic travel delays, affecting the reliability of commuting by bus through the Lincoln Tunnel. To further compound congestion, if a bus breaks down in the XBL there is no alternative but for buses to use the eastbound roadway of Route 495. These situations completely erode the travel advantages of the XBL for bus riders and create an acute congestion condition for the entire corridor.

Immediate Actions Addressing the XBL Capacity Challenge

The Port Authority of New York and New Jersey and its operating partners have undertaken a number of immediate actions to help manage the growing concerns of the capacity shortfalls in the XBL. These actions have included an assortment of operational and physical changes to the XBL to better accommodate increasing volume demands. To improve the flow of XBL buses, the Port Authority has initiated the following operational and physical changes to the lane:

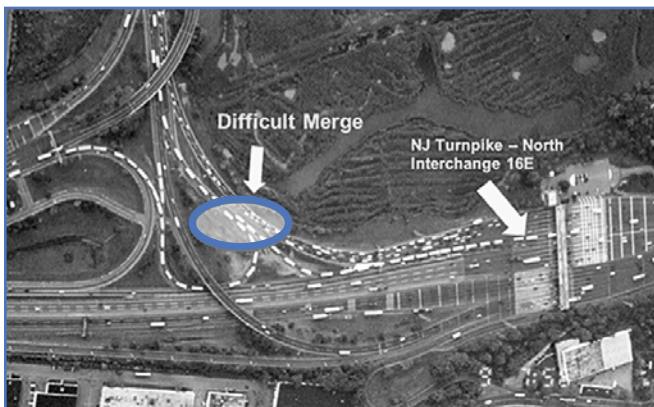
- Prohibited empty buses from using the XBL in order to reserve capacity for moving people.
- Prohibited charter buses prior to 9 a.m. to ensure the highest demand periods are reserved for commuter services.
- Required E-ZPass on all XBL buses to ensure a minimum amount of delay at the toll plaza.
- Opened the XBL 15 minutes earlier to accommodate increased bus demand in the early morning hours.
- Constructed bus acceleration lane at the entrance to the XBL to allow higher speeds at the difficult merge leading to the contra-flow lane.

Even with these improvements, the XBL cannot maintain its current service level and reliability as bus demand continues to grow and the XBL reaches its practical capacity. Forecasts indicate that even with commuter rail improvements and expanded capacity to New York's Penn Station, the number of buses will continue to rise in order to serve growing population centers that are not well served by the rail system. We must begin the process of looking into new alternatives and strategies to ensure that the future of the XBL and the vitality of this important transit corridor are preserved into the future.

The XBL Capacity Expansion Feasibility Study

Despite immediate physical and operational improvements, bus demand has continued to rise, placing increasing burdens on the system and the corridor. The

PANYNJ, NJDOT, and the NJ Turnpike Authority have joined to undertake an Exclusive Bus Lane Capacity Enhancement Study for the Lincoln Tunnel to investigate possible enhancements for buses and high-occupancy



Congestion at the XBL Entry Merge

vehicles (HOVs), such as vanpools and carpools, using the Lincoln Tunnel. This study is being funded through a grant from the Federal Transit Administration and is scheduled for completion by December 2005.

Project Goals

There are no preconceived notions about what the right set of solutions might be. The scope of work for this study is designed to be very broad, encompassing an open look at a full array of options. The overall goal of this project is to ensure that the road network serving this corridor is prepared to serve more passenger trips in a more effective manner. The emphasis will be on moving more *people*, not moving more *vehicles*.

The work will include: (1) operational alternatives for priority treatment on the existing road network, (2) physical alternatives for lane separation, ramp connections and access, (3) potential use of new technologies to enhance current operations, (4) larger capital improvement options that could expand capacity.

The XBL Capacity Enhancement Study could result in the following:

- Continued success of the XBL by increasing the capacity of the roadway system along Route 495.
- More reliable travel times for bus commuters.
- Increased commutation by bus, thus managing traffic growth on Route 495 and the Lincoln Tunnel. (Many of the growing residential areas in western, central, and southern New Jersey are not served by commuter rail.)

Next Steps

Based on an evaluation of market demand and traffic conditions, alternative roadway configurations will be developed and analyzed along Route 495.

Alternative roadway configurations will address the following:

- Safety
- Access, type of access (e.g., ramp or adjacent lane)
- Maintainability of the facility
- Operability during bus breakdown
- Potential for shared use of the lane (e.g., busway/High Occupancy Vehicle Lane or busway/High Occupancy Toll Lane)

Selection criteria for a preferred alternative include ability to cost-effectively meet project goals, to provide effective and safe traffic operations, and to minimize potential social, physical, and environmental impacts.

Public Input

During the course of this study, public meetings will be held to solicit ideas and suggestions from various stakeholders. Our first public meetings in March 2005 are designed as informational sessions whereby the project will be fully explained in detail. These sessions enable members of the general public to ask questions and to offer their input into the process. Additional public meetings will be scheduled in fall 2005 after several alternatives and findings have been further developed.



New Acceleration Lane at XBL Entrance

"The Hudson River Crossings are critical to the economic vitality of this region.... This study will help us identify new and innovative ways to improve the services we provide to our customers." – Port Authority Chairman Anthony R. Coscia

Project Information

For further information about the project visit <http://www.panynj.gov/tbt/ltframe.HTM>, or contact:

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