

**National Surface Transportation Policy and Revenue Study Commission**  
**Field Hearing - New York City**  
**November 15, 2006**  
**7:00 a.m. - 1:30 p.m.**

**Technical Tours**

- **World Trade Center Transit Center Redevelopment**
- **New York Penn Station Passenger Rail Complex, Operations and Tunnels\***
- **Rail Passenger Facility Linking the Newark Airport and the Northeast Corridor**
- **Multi-modal Operations at the New Jersey Marine Terminal Complex at the Port Authority of New York and New Jersey**
- **Hudson-Bergen Light Rail System**

**Overview**

The technical tours on November 15 will provide the Commissioners an opportunity to experience first hand some of the characteristics of the Northeast region's surface transportation system – a mature, complex, multi-modal system that supports intense passenger movements and freight and trade gateways to the national and global economies; a system that requires multi-agency and multi-states coordination for its planning, operations, management and financing; and a unique rail corridor that is the nation's most complex and densely used passenger rail network.

The development, maintenance and operations of this complex multi-modal system affect both the regional and national economy – through its impacts on the condition and performance, and the resulting implication on system needs and financing.

\* Information Attached

## Penn Station Central Control

*A model of cooperative effort and technological advancement that has helped to serve the busiest railroad station in the United States.*

## A Tale of Two Railroads



*Long Island Rail Road*

*Amtrak*



## Pennsylvania Station

- *Penn Station has 21 station tracks, a total of seven tunnels*
  - *four tunnels east to Queens,*
  - *two tunnels west to New Jersey*
  - *one tunnel north to Albany*
- *It serves as a hub for Long Island Rail Road, Amtrak and New Jersey Transit*
- *There are 1,392 daily train movements at Penn Station. A total of 1,032 scheduled trains operate daily through Penn Station. (Amtrak – 101, NJT – 348 and LIRR – 557)*

## Infrastructure

- *The Long Island Rail Road, Amtrak and New Jersey Transit, together with NYC Transit, provide transportation for approximately 570,000 people*
- *9 pedestrian entrances/exits to street level*
- *Since 1910, infrastructure of Penn Station and the vicinity remained primarily unchanged*
- *Aged signal equipment challenged the ability of LIRR and Amtrak to meet growing service demands*
- *1988 - LIRR and Amtrak entered into an agreement to build a new control facility that would improve and centralize control*

## Communications

- *Tower communications consisted of an intercom system and phones, with no visual aids*
- *No overview supervision of remote towers, making communication more difficult*

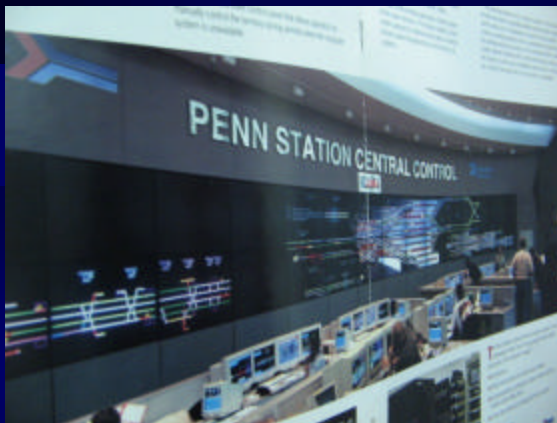
## PSCC Computer Application

- *Increased Train Routing Capacity*
- *Computer-aided centralized traffic control, eliminating manual functions*
- *Digital light projection overview display*
- *High resolution “full graphics” interface*
- *Voice communication system*
- *Data transmission system for remote control of 16 interlockings*
- *TIMACS (Train Information Management and Control System)*

## PSCC Construction

- *Construction of the Claytor-Scannell Control Center began in February 1991 and was completed in July 1994*
- *Penn Station signal system upgrade*
- *Planning, development and oversight would integrate LIRR and Amtrak resources*

## PSCC 1999



- *Penn Station Central Control Operating Theatre opens*
- *Computer-aided centralized traffic control*
- *High resolution graphics and extensive operator interfaces*

## Security Challenges

- *Blackout of 2003*
  - *Station Evacuation/Crowd Control/Communications*
- *Madrid 2004*
  - *Situational Awareness*
- *Republican National Convention 2004*
  - *Service Snapshots*
- *London 2005*
  - *Appendix G – LIRR/Code Black - Amtrak*
- *Katrina 2005*
  - *Hurricane Preparedness Plan*



## Hudson-Bergen Light Rail

**The Hudson-Bergen Light Rail (HBLR)** is a vital light rail connection that links the growing cities of the Hudson River waterfront. HBLR serves the high-density commercial and residential centers in Jersey City and Hoboken and connects to ferries, PATH, and commuter rail. Beginning in Bayonne, the operating corridor extends through some of the nation's most densely populated municipalities, a region noted for significant dependence on transit. New, 70 percent low-floor, electric-powered light rail vehicles are serving the waterfront towns of Jersey City, Hoboken, Bayonne, Weehawken, Union City and North Bergen. Traveling both on city streets and along separate rights of way, HBLR is the first public transit project in the nation to use the Design, Build, Operate and Maintain (DBOM) construction methodology. In September 2000, NJ TRANSIT was awarded the American Public Transportation Association's prestigious "Innovation Award" for use of the DBOM methodology.

HBLR is being realized in distinct segments.

- The first Minimum Operating Segment (MOS1) runs from 34th Street, Bayonne, to Hoboken Terminal, at a cost of \$992 million.
- The second segment, MOS2 runs from Hoboken Terminal to Tonnelle Avenue Park-N-Ride in North Bergen and also extends to 22nd St. in Bayonne, this segment cost \$1.2 billion.
- The third phase of the HBLR will extend the system south to 8th Street in Bayonne and is currently in the preliminary engineering stage. Service is expected to commence in late 2009.

The project is funded by the Federal Transit Administration (FTA) and the State of New Jersey. NJ TRANSIT has secured Full Funding Grant Agreements with the FTA to fund 61 percent of the cost of MOS1 and 41 percent of the cost of MOS2.

The first portion of MOS1 from Bayonne opened to Exchange Place in April 2000, and to Newport Mall in November 2000. Construction of MOS1 to Hoboken was completed in September 2002. Bayonne's 22nd Street Station and the first of seven MOS2 stations, opened in November 2003. Service to Lincoln Harbor in Weehawken opened in September of 2004. MOS2 was completed to Tonnelle Avenue on February 25, 2006.