



The LiRo Group

Client:

Port Authority of NY & NJ
JFK International Airport,
Building 111
Jamaica, NY 11430

Reference:

Edoardo Cuniberti
Principal Traffic Engineer
973-565-7844

Total Project Cost:

\$78,000,000

Completion Date: 2003

Project Overview:

LiRo provided traffic engineering services on an as-needed basis at JFK Airport and Newark Airport. (PANYNJ, \$78M)

Traffic Engineering Services at NY & NJ Airports Queens, NY

LiRo provided traffic engineering services on an as-needed basis. To date, assignments have included:

- A low speed weaving analysis-requiring calibration of the HCS results with empirical data for LOS determination (LaGuardia Airport)
- Exit roadway signing analysis requiring collection and interpretation of origin and destination data (LaGuardia Airport)
- Alternative analysis of egress ramps from a proposed multi-level parking structure (LaGuardia Airport)
- Frontage analysis of HOV operations at U.S. Airways and Delta Airlines (LaGuardia Airport)
- Accident analysis of parking lots 9 and 10 (John F. Kennedy International Airport)
- Traffic/civil design of signal system and crosswalks for Central Terminal Area (Terminals 2 and 3) where services included traffic analysis and development of a final design, MPT and construction document package
- Field inspections of Kennedy Airport traffic control devices, to evaluate their condition and effectiveness
- Preparing Sign Service Requests (SSRs) related to signs, pavement markings, and delineation devices (Quick Kurb, etc.). LiRo staff will capitalize on our extensive knowledge of the MUTCD and the new PA standards (JFK and LGA).
- Performing various traffic analyses and studies (JFK)
- Support with the design of parking lots, including the determination of adequacy of handicapped parking spaces (JFK)
 - Speed and Delay Studies (JFK)

JFK AirTrain

LiRo staff was responsible on an ongoing basis for the daily inspection of maintenance and protection of traffic for the AirTrain construction project including reviewing plans, representing the Port Authority at meetings, investigating construction sites, and responding to incidents with follow-up support (John F. Kennedy International Airport).

- Verified that all lane closings and detours conform to the approved plans and any applicable standards
- Ensured that all MPT related activities such as implementing lane closings and detours were performed in a safe manner acceptable to all state and federal guidelines.
- Monitored vehicle and pedestrian traffic flow to identify problems caused by construction related activities, such as improving detour signage and improving traffic signal timing.
- Attended weekly MPT meetings with the contractor and Port Authority to discuss coordination issues and address any concerns the Airport facility may have in regard to current and future detours.
- As an integral part of the Joint Operations Center (JTOC) responsibilities included identifying any incident on the Van Wyck Expressway that may impede traffic flow to the JTOC. Informed the JTOC of ongoing construction activities on the Van Wyck such as lane closures and report the observed level of service for the roadway.



LiRo conducted a passenger survey for AirTrain that focused on collecting non-revenue pedestrians using the facilities stations A, B & C and terminal stations 1, 2/3, 4, 5/6, 7 & 8/9. In addition, a verbal survey was also conducted. The findings were assembled in a technical memo including summary sheets and the raw data.

Newark Airport

Assignments at Newark Airport have included:

- Roadway pavement markings and signing
- Roadway safety studies
- Assistance with developing an overall MPT program for the airport's capital programs
- Analysis of vertical and horizontal clearances along roadways
- Preparation of service sign requests
- Professional assistance with the design and placement of variable message signs
- Technical assistance with the preparation of presentations concerning MPT strategies

The conceptualization and review and layout of trail-blazer signing tasks included the preparation of Service Sign Request forms and the investigation of alternate means for detection of oversized vehicles.

Parking Garage for Terminals 8 & 9, JFK

LiRo provided professional traffic engineering services to assist in the design of a new parking garage for Terminals 8 and 9 at Kennedy. The future five-story garage will provide parking for customers utilizing American Airlines and a direct connection to the Terminals 8/9 JFK AirTrain Station. The garage will add 1950 public parking spaces into the Central Terminal Area. To maximize capacity parking spaces, the entrance plaza was located outside the garage footprint and a double threaded helix would accommodate the vehicular flow between levels. The project required extensive coordination with all other engineering disciplines, primarily civil, architectural and structural.

During the expected 22-month construction period, LiRo assisted in the design of a new temporary parking lot outside of the Central Terminal Area that would accommodate 850 public spaces for the American Airlines patrons. An extensive detour plan was designed. Free shuttles will transport customers to and between the terminals.

Key Features:

- Coordination of civil, electrical and traffic design
- Contract document