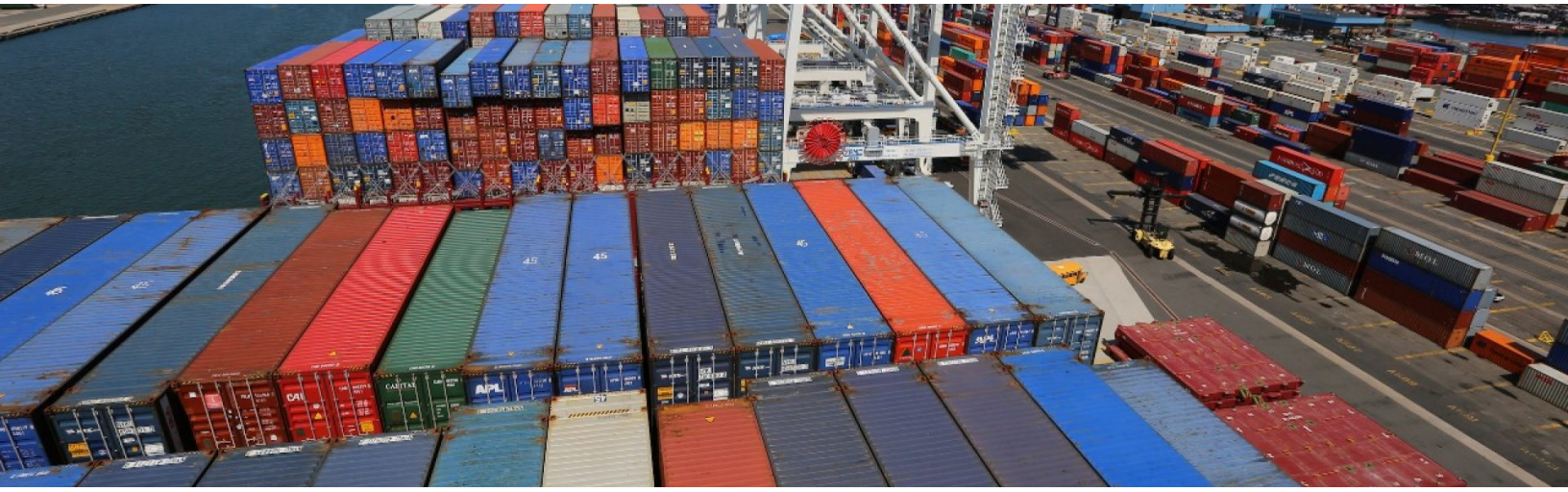
CargoSprint

eModal

CASE STUDY:

Port of New York and New Jersey



OVERVIEW

A Common Collaboration Portal for New York and New Jersey
Streamlining landside operations by ensuring data consistency and building stakeholder trust:
A common system of record for the Port Authority of New York and New Jersey was the first of its kind in the US, providing a unique platform driving efficiency and cargo velocity for all port stakeholders.

THE CHALLENGE

In late 2013, the Port Authority convened the Port Performance Task Force (PPTF), comprised of executive-level port constituents. The goal of the Task Force was to identify challenges to port efficiency and provide a forum wherein everyone could discuss their common interests, identify challenges to port efficiency and service reliability and recommend potential solutions and Key Performance Indicators (KPIs), all aimed at maintaining the port's position as a preeminent port in the United States.

After extensive collaboration, the task force produced 23 recommendations, which the PPTF prioritized according to the impact on long-term efficiency, service reliability, and feasibility of implementation. These recommendations, based on input from the port community, indicated a need for increased efficiency, measurement, communication of data in a timely and meaningful manner and transparency.

CargoSprint's eModal Aided in Addressing Two of the Primary Recommendations:

- Integrated Port Community System (PCS) Utilization: An integrated Port Community System to optimize logistics planning and information sharing must ensure key information is communicated in real-time to the port community.
- Radio Frequency Identification (RFID) Technology to Measure and Report on Truck Movements: RFID technology measures and reports various truck movement times, including turn times within the terminal, queue times at terminal entrance gates and traffic on the port roadways leading to terminals. The availability of near real-time information on actual conditions will facilitate informed decision-making, which could lead to better productivity. RFID can be the key to more accurate planning and information that is more reliable.

THE SOLUTION

Port Community System

Today, the Port of New York and New Jersey use a CargoSprint eModal developed Port Truck Pass (PTP) system to issue and manage RFID tags for drayage trucks. Sustainable Terminal Services, INC (STS), a nonprofit corporation composed of the port's five major container terminal operators, also helped develop PTP. Users can readily modify and expand PTP to include additional services in a single website. The Port Truck Pass system provides more enhanced services to the port community including:

- Real-time information on container availability and bookings
- Real-time information on highway and port traffic congestion
- Visibility of inbound and outbound movements at terminal gates
- Notices and alerts (e.g., vessel cut-offs, extended gates, etc.)
- Equipment availability
- Information on Customs and Border Protection (CBP) exams
- Accessibility via an internet-enabled computer or a smartphone application

Truck Tracking Through Radio Frequency Identification (RFID)

Reliable and accurate information about conditions throughout the supply chain enables informed decision-making, resulting in greater efficiency and productivity. Today, some terminals report information about terminal conditions or “burst fax" one to two times a day. These reports state qualitatively that the gates are, for example, “light and running free” or “heavy traffic expect delays.” Similarly, the truck drivers have reported conditions on their own through the Port Driver Facebook page with comments that are not helpful and often inaccurate.

An RFID system was introduced in the port to identify all trucks seeking access to the secure area of the container terminals. Through a series of readers installed at each container terminal gate, small RFID tags mounted on nearly 16,000 trucks that service the port provide information that helps terminal operators to determine if the truck meets the requirements for entry.

RFID technology is a cost-effective and reliable method to monitor activity seamlessly. The current RFID system can expand to quantitatively measure and report on various truck movement times, including turn times within the terminal, queue times at terminal entrance gates and traffic on the port roadways leading to the terminals. However, since the RFID system is privately owned and operated through STS, discussions are needed to explore the viability of expanding the existing system, the attendant related costs and who should bear such costs.

The RFID system generates information that should be available to the trucker and/or beneficial cargo owners on a transactional basis and be made publicly available on an aggregated basis. At a minimum, RFID readers should be at both the outgates (or closest approximation) and the entrance to all terminal queues. The queue area would need to be defined and agreed to by multiple stakeholders, including terminal operators, truckers, and the Port Authority.

THE IMPACT

Terminal Appointment System

CargoSprint has also completed the first New York and New Jersey marine terminal appointment system go-live for the Global Container Terminals (GCT) automated facility in Bayonne, New Jersey. Publicly released results confirmed by GCT in JOC.com have shown turn times reduced by over 45% after implementing the New York and New Jersey customized appointment system.