



Hunts Point Terminal Market: The Demand for Waterborne Transportation as a Part of the Outbound-Distribution System

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Researchers

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Abstract

New York City roads and highways leading to the City are congested, in part, due to trucks delivering food products. Some of the deliveries are to the Hunts Point Terminal Market (HPTM) located at the Hunts Point Peninsula. HPTM is the largest fresh food distribution center in the United States. It is the source of 60%¹ of food distribution in the New York Metropolitan Area. These trucks increase traffic congestion, pollution, and wear and tear of the roads. In turn, this increases the cost of living in the City, commute time, medical problems and costs, and reduced productivity to name a few negative impacts.

The goal of the study is to explore an alternative to the primary use of trucks for outbound delivery or pickup of food products from HPTM in the metropolitan area. *The alternative proposed is the use of waterborne transportation, e.g., barges or freight ferries, as part of the food outbound-distribution system. The study's objective is to quantify the potential demand for waterborne services from which vehicle mile savings will be determined.* The waterborne vessel will be loaded with food products at HPTM and moved (self-propelled or pulled) to a strategically located predetermined site in the metropolitan area. Customers will pick up their preordered food products from this site. After the waterborne vessel is discharged, it will travel back to HPTM for the next day's operations.

¹ Deputy Mayor Steel and NYCEDC Announce Hunts Point Terminal Produce Market Commits to Stay in the Bronx Until At Least 2021, Press Release, December 31, 2013, <http://www.nycedc.com/press-release/deputy-mayor-steel-and-nycedc-announce-hunts-point-terminal-produce-market-commits>

Findings

An outbound, waterborne-transportation system moving produce from HPTM to its consumers will significantly reduce the surface transportation traffic and emissions in New York City east of the Hudson River.

A fully operating waterborne system functioning east of the Hudson, completely replacing the present surface transportation system, would have a net-effect estimate of:

- savings of 39,500 miles per day (10.3 million per year)
- emissions reduction of 37,300 pounds of carbon dioxide (CO₂) per day (9.7 million pounds a year)
- savings of 2,076 gallons a day (540,000 gallons per year and \$1.35 million at \$2.50 per gallon)
- savings of 1,000 to 1,500 hours of driving per day

Challenges

To obtain a reliable outbound, waterborne-operation system, a few major challenges need to be overcome, such as lack of trust between wholesalers, scale of products delivered, schedule, and local delivery. Other challenges include community objections, service quality and customer relations, and the loss of toll revenues for the City agencies. The key conclusions are highlighted as follows:

- The present operation system has minimal trust among HPTM wholesalers. Without trust, there is no collaboration in pooling resources together in order to establish the proposed operation.
- The present operation is dominated by small individual trucks with on-demand delivery schedules (24/7). The retailers have grown accustomed to and depend on this schedule. Altering the schedule might present a problem. Another question that arises is: Will the outbound-distribution system work with a one-hour pickup time?
- The present operation **includes produce rejection** with immediate and unconditional return to the wholesalers. This implies the return of produce to HPTM by the deliverer.
- The present delivery includes a **door-to-door** service from the wholesaler or broker to the retailer. Modifying the “last mile” operation might be a challenge for some wholesalers, retailers, and brokers.
- At the present time, the retailer can order on the spot. This ordering alternative will not be available in a waterborne operation. It might be supplemented with a vehicle delivery.
- The waterborne operation needs to obtain high-volume shipments to make the operation economically viable.
- The new friendly landing sites for vessel discharge might raise **concerns** for the surrounding communities (Not In My Back Yard) because of increased traffic, noise, emissions, and other factors.
- The waterborne operation’s inability to closely monitor service quality and customer relations between wholesaler and retailer creates a concern for some wholesalers.

- The toll revenue reduction from fewer bridge crossings might find objection from agencies who depend on those revenues.
- The definition, role, and function of the Third-Party Waterborne Delivery Provider (3PWDP) proposed in the study are a concern to some wholesalers.

Recommendations

An outbound, waterborne-distribution system is a challenge to develop but the benefits to NYC could have very visible benefits, such as reducing traffic congestion, pollution, wear and tear of roads and bridges, as well as using the marine highway that is underutilized at this time. Indirectly an outbound-waterborne distribution will also reduce the cost of living, commute time, and medical problems and costs; in other words, an increase in productivity could be expected.

Adopting and implementing an outbound-waterborne distribution requires stakeholders' cooperation and support. There are many stakeholders including wholesalers, retailers, and government officials at various local and State levels. A waterborne outbound food distribution should be an important undertaking by authorities in populated areas with rich waterway alternatives. The challenges and complexities could be overcome with government leadership.

The implementation of an outbound, waterborne-distribution system should be gradual, starting in Brooklyn. Brooklyn has the appropriate facilities in place for this type of operation and, after the Bronx, it is the largest consumer of produce from HPTM. These two factors make Brooklyn the most appropriate candidate to start the operation.

Once the waterborne operation is fully operational, it will reduce the number of vehicles from the main roads and mitigate all associated externalities, which are mostly negative. However, there will be an increase in traffic in areas near the offloading location. The actual amount of traffic increase from pier to retail business will be determined by the quantity of produce delivered, type of truck, and time of day.

The conclusions and recommendations for this preliminary study of the potential demand for waterborne outbound-produce distribution from HPTM indicate that there are severe multiple challenges in developing an outbound-produce distribution from HPTM to New York Metropolitan Area sites east of the Hudson. Thus, it is difficult to envision them resolved in the near future.