

FHWA Freight Transportation Industry Internship

Retail/Wholesale Warehouse and Distribution Centers



These internships are designed to enable public sector participants to better understand: 1) how these industries' supply chains work; 2) how are transportation decisions made and who makes them; 3) what drives decisions; 4) how does the industry manage or contend with transportation problems and issues; 5) what critical situations require immediate changes to modes, routes, or schedules; 6) the impact of transportation infrastructure conditions; 7) the importance of the on-time performance of the industry's supply chains and distribution networks; and 8) the economic and policy environments that shape the supply chains. This may be accomplished through focused questions and discussions with responsible industry staff and firsthand observation.

Industry Description – Warehouses and Distribution Centers: may receive parts, raw materials, and/or finished products and distribute them to end users manufacturers, stores, and/or consumers. They may receive or ship a variety of items or a single commodity in each shipment. Warehouse and distribution centers may also provide some Third Party Logistics (3PL) functions (assembling goods, packaging and pricing them, controlling shipping etc.).

Prior to the Internship: Gather general information on the host company.

Research/contact the host facility

- Identify the type of facility in which you may be working. If interning at a distribution center or warehouse, ask to whom do they deliver, e.g., to stores, manufacturers, consumers, or a combination; is there a flow through operation
- If interning at a wholesale facility, ask if it is also used as a storage facility; are there specific goods that the center ships or receives
- What is the service area of the facility; is it local, regional, or national What are the operating hours for the facility; if it is a 24 hour operation, what are the shift schedules

Coordinate and clear your proposed activities with the host company

- Schedule and clear all internship activities with a host company official (including participation in meetings, observations, rides with drivers, and interviews) prior to the internship

During the Internship:

Meet with the Vice President of Government Affairs (or someone of comparable position) to determine the potential activities to observe.

- How does their supply chain work; what comes into the facility and what is shipped out; where does it come from and go to
- Understand their employees
 - What are the critical roles of the logistics (transportation, distribution, supply chain) staff and what is the organizational structure
 - What are the critical roles and organizational structure of the rest of their company and how do they interact with the logistics staff
- What are the critical supply chain decisions being made and is the role of government affairs, logistics, finance, customs compliance and other key staff in making those decisions
- How does the supply chain and transportation impact customer satisfaction
- How do key issues impact their business and its operations
 - Fuel prices
 - Increase or decrease in demand for products (economy)
 - Seasonal impacts
- How does their business operate today compared to the past; one year ago, five years ago, or more
 - Can a significant change in operations be defined at some point in time and what was the impact of that change on transportation
- Is the host familiar with the role of the public sector (agencies/organizations) in transportation decisions and do they understand how these decisions can affect their operation
 - If yes, does the host interact with the public transportation agencies/organizations; how and why
 - If no, frame a discussion around this point to determine if there is a benefit to the host interacting with the public transportation agencies/organizations.
- Do they participate in an organization or association that may interact with public sector transportation agencies; can they describe the benefits

Discuss the intern's public sector job function

- What types of decisions are made by the FTII participant; how may these decisions impact this company's performance
- How can participant or agency better communicate with this company and vice versa
- What can be done to improve transportation efficiency for the industry

Meet with the logistics organization

- What modes, volumes, and schedules are used to ship materials into and out of the facility
- Where do the parts, raw materials, and product(s) that are shipped to the warehouse/distribution center come from
- Are there any other stops (from the distribution center to the wholesale/retailer); do the materials leave the warehouse/distribution center and go directly to the wholesale/retailer
- What is the final destination of the product(s)
- How much of the company's business is geared towards JIT delivery; what are advantages/disadvantages of JIT
- What is the process for scheduling the distribution of goods
- Does the demand for the distribution of goods fluctuate on a daily basis (e.g., during peak rush hour traffic) as well as seasonally (e.g., higher demand during the holiday season); how does the host industry adjust to accommodate these factors
- How do they decide where and when trucks come and go from the facility; what is the process for getting trucks in and out of the facilities
- What criteria are used to determine which mode (air, rail, truck, or water) are used

Meet with Warehouse/Distribution Center Operations

- What steps are taken to ensure sufficient truck access to the warehouse/distribution center
- What measures are applied to reduce truck congestion within the property and nearby
- Are they aware of transportation infrastructure improvements that could improve operations (e.g., lengthening an airport runway, adding more access routes/lanes for inbound and outbound truck traffic, etc.)
- How do they evaluate transportation related performance
 - Productivity:
 - On time shipment
 - Truck turn-around time
 - on time delivery
 - transportation cost
 - traffic-related transportation delay
 - Day-to-day, week-to-week, year-to-year variability/comparison

- Safety & Maintenance:
 - Equipment down time
 - maintenance, repair and operating cost

If receiving or shipping internationally, meet with the Customs compliance department

- Ask about the processes involved in receiving, screening, and distributing their products

Observe inbound, internal, and outbound operations

- What products and materials are being shipped into and out of the facility; when and how
- What percent of the incoming products are returns
- What prompts a change in mode, schedule, or route
- What are the receiving and shipping processes, any unique handling characteristics
- How do they adapt or change; who makes the decision; how is it communicated; how quickly is it implemented

Conclusion of Internship:

- Lessons learned from the internship experience should be shared by both the host and participant with the public agency and host company
- Identify opportunities for collaboration in the future

Contact:

FHWA, Office of Freight Management and Operations,
U.S. Department of Transportation
Federal Highway Administration
Office of Freight Management and Operations
1200 New Jersey Avenue, SE
Washington, DC 20590

Phone: 202-366 0408; Fax: 202-366-3225
FreightFeedback@dot.gov
Web site: www.ops.fhwa.dot.gov/freight

March 2011 FHWA-HOP-11-016