

---

*Logistics is a part of many businesses' customer service agreement and surveyed by experiences.*

One of my primary accounts (UPS) has a time of year when volume picks up more than any other time throughout the fiscal year. UPS considers this "Peak Season". During this time of the year, UPS customer demands increase by 24% (system wide) starting in the month of October, concluding mid-January. Volume increases in the Portland region during peak season last year went from 300 UPS specific containers per day to 350-360 containers which calculate to a 16.7% increase. UPS depends heavily on Union Pacific's rail services to meet the demands of their own services to the customer.

Task: Decrease the dwell time of each container in my facility (yard) with an increase in volume

To track performance on how long a container spends being processed from train to customer; I use a KPI metric outlining train arrival to container ground time. Yearly commitment contracts with UPS are based on these measures and how my sector performs. Each year, the commitment with UPS is to maintain the time of 2.4 hours for each container, arrival to customer possession. That means, once a train arrives into my yard, it should take no longer than 2 hours and 24 minutes for the containers to be unloaded from a train and become available to a UPS dray driver.

The UPS dray drivers pick up each container from an assigned slot on the 42-acre yard in Portland. The average time that each container was taken off of a train by a lift contractor, loaded onto a chassis, parked into an assigned slot and picked up by a UPS driver was 44 minutes. This number increases to roughly 1 hour during Peak Season due to more traffic in the yard. I not only wanted to decrease the Peak Season time but also the yearly non-peak average down to 35 minutes, getting containers to the UPS drivers quicker and more efficient. Thirty-five minutes was the time it took for this process on weekends with less traffic in the yard, making it obtainable with my process change idea.

The opportunity was to strategically change the directions of the parking slots, change traffic patterns and standardize routes for contract drivers not conflicting with dray drivers retrieving containers. After a 3-month time study signifying Saturday-Tuesday, I gathered data which included weekend operation and the heaviest days of the week. Once the data was analyzed; I was prepared to implement a change to decrease the 44 minute average to my goal of 35 minutes. The catalyst causing high dwell was that drivers were taking longer routes to exit the yard after container retrieval. The majority of the parking slots were designed at a 45° angle. Using this design, driving lanes were stricken to one-way traffic. Using my proposed design, a lesser angled degree for each parking slot allows two-way traffic, creating a passing lane and quicker exit routes, reducing dwell.

My budget was \$415k, retained from a previous construction project. I was able to solicit a contractor for pavement treatment, striping for lanes and slots and creating passing lanes. As a result, the process time (container unload>parked in assigned slot>customer retrieval) decreased from 44 minutes to 38. Yet more importantly, dray drivers are cycling through the yard faster, spending 33% less time in the yard.