

Logo:**Abstract:**

Due to its strategic location, the Meadowlands site acts as a gateway hub that attaches all of New England to the rest of the country; and when looked at the reverse, all packages flowing to New England from the rest of the country pass through the Meadowlands. As a result of this, every day over one thousand feeders (tractor trailers) move in and out of the facility. The way the UPS transportation network is set up, drivers will leave their home facility with a feeder full of packages that needs to go to a specific destination, no more than four and a half hours away. i.e. A driver will start his day in Chelmsford, MA, and then drive four hours to Secaucus, NJ. Once arriving at their destination, the driver is instructed to drop off their feeder, and pick up another. Once they have picked up the appropriate feeder, they return to their home facility. Utilizing a continuous 24-hour operation, UPS can move trailers across the country in four days, while allowing employees to report to the same building every morning.

The problems with this system arise after the visiting drivers enter the facility with their trailer. The over one thousand feeder spaces are not labeled or organized by one standard system. Over the past 20 years several systems have been partially implemented, but not one has lasted for over 18 months. The problems occur when a visiting driver is told to place their trailer in spot #249, and they cannot find it. They end up dropping the trailer off where ever they wish, and not mentioning it to dispatch. Now they go and find the trailer they need to return home with, and then they disappear to wherever they came from. The Meadowlands now has a trailer on property, and no one knows where it is. This can lead to serious delays in the hub (sorting) operation. The operation will want a trailer brought to a door so it can be unloaded, but the feeder department will not know where it is, and the hub ends up being slowed down because it runs out of packages.

Website: http://www.stevens.edu/engineering/seem/UPS/project_statement.htm