

Sign Production and Inventory Logistics Study TRyy1122

Question 1:

How does MODOT currently measure "demand" in this system. That is, how are the locations which require sign deliveries determined and is the frequency of deliveries known for each delivery location? Do these deliveries follow a predictable pattern, or do they vary randomly? Are sign deliveries forecasted in any way?

Answer:

Currently, orders are sent in to the Sign Production Center on a weekly basis. Those orders are fed into the production schedule as they are received unless a special time line is requested. Each of the 10 districts have a crate(s) into which finished signs are deposited in preparation for shipment. Shipments are typically made to two to three of the 10 districts at a time and the shipment is triggered when a reasonable load is created. Shipment frequency increases with order rates. When a crate is full, but there is not enough crates for a shipment the district is notified and they may choose to come and pick the crate up themselves if they do not want to wait. There is no real pattern or forecasting of the deliveries. Deliveries are really driven by the number of signs ordered and the locations that order them.

Each district has a sign warehouse and that warehouse manager orders signs for their district. They order to maintain their warehouse as well as order signs to fill requests from within their district. One of the issues we are trying to correct is that many times orders from the field were sent directly to the production center and not pulled from district inventory, this has resulted in excess inventories that are now being downsized through use.

Question 2:

Are deliveries from warehouses made to multiple destinations on a single route, or are they single stop routes?

Answer:

From the central production center deliveries are made to only one location per district by a contracted freight hauler and then distributed within the district by MoDOT vehicles. As stated above, shipments to the district are grouped to make full loads and consolidate trips.

Question 3:

What type of inventory system is currently being used for sign production and storage (e.g. periodic or continuous inventory review)?

Answer:

The state of Missouri has a financial tracking system that maintains all transactions and inventories; however, it has a lag – that is, it is not in real time. Each district and the central production center typically has a backup system that

is real time. MoDOT is; however, working on a state wide system that will be used by all warehouse with signs that will be real time, allow the state system to be updated and allow MoDOT wide visibility of all sign warehouse. This is expected to be in place early next year.