

# Supply Chain, Location Optimization, Inventory Modeling and DC Design

## Targeted Solution – Improve Service and Reduce Costs for a Steel Service Center

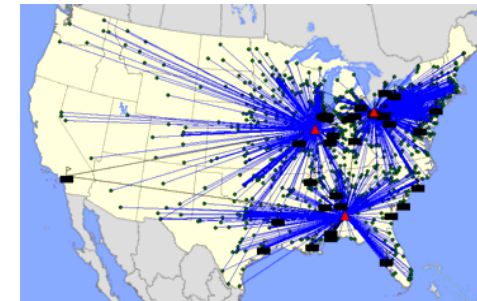
### OBJECTIVE

To open up new markets for revenue growth by adding new build-to-suit facilities for a national steel service center. Growth would be financed by reducing inventory and improving work flow while maintaining and improving existing customer service levels. The Greenfield facility will be sized and designed to minimize space requirements, leverage new technology and improve work flow to reduce operating costs. Identify best market locations for to add visibility and speed to supply chain.

### SOLUTION

The results were:

- Identified a one time inventory savings of \$26 million by moving processing lines from a “make-to-stock” to a “make-to-order” strategy
- Identified automated material handling opportunities to contribute a reduction in operating costs of \$3 million through introduction of crane, automated guided vehicles (AGVs) and improved workflow.
- Designed a new Greenfield facility to support expansion. Introduced inbound rail and a revamped docking strategy.
- Mitigated business risk by developing a multiple phase implementation strategy to allow easy exit.
- Identified new market locations for two new facilities that created a savings of \$39 million in transportation costs (vs. a centralized expansion model.)



### APPROACH

Working in tangent with management, the team evaluated order patterns, sales forecasts, inventory levels and historical trends. Analyzed the service levels, inventory and material handling options to identify areas of greatest improvement opportunities that would support a sales growth of 200% over the next 5 years.

By automating the material movement to and from the processing lines, using larger coils and introducing rail options, the team created a go forward strategy that funded expansion through inventory reduction and reduced operating costs.