

Ideas for Leadership in
Logistics and Transportation



The Official Magazine of the Logistics Institute

- [Home](#)
- [Archives](#)
- [Subscription](#)
- [Advertising](#)
- [Announcements](#)
- [Links](#)
- [Contact Us](#)
- [Editorial Guidelines](#)
- [Who Reads LQ](#)
- [Advisory Board](#)
- [Statement of Ownership](#)
- [Legal](#)



[Click Here](#)

May 16, 2007



The Institute's Executive
Program in Toronto
April 22-27 2007



[Back to List](#)

Transportation Cost Reduction Laying Down the Laws

Effective transportation cost reduction is like a game of Whack the Mole. As we thump one mole down, rest assured another will poke its head up. The challenge is to understand when and where the next mole will appear... Accordingly, transportation costs cannot be addressed without taking customer service and inventory issues into consideration.

Robert Martichenko

Platinum Sponsor



Gold Sponsors



RECENTLY MY WIFE AND I hosted a birthday party for our youngest daughter. At her request, the party was held at the local Chuck E. Cheese restaurant. I was dreading an afternoon of sensory overload followed by a day for recuperation. However, I was pleasantly surprised when I became totally engaged in one of the games. In fact, I went back for more tokens on several occasions!

Whack the Mole is a simple game. A mole pops its head up and you whack it with a big foam mallet. When you whack the mole, another mole pops its head up in another part of the game and your job is to react as quickly as possible to whack the new mole... and the game goes on until you are exhausted or out of tokens.

As I played this game I saw an opportunity to teach and to learn with my children. I gathered my two daughters and their young friends for a "Lunch and Learn" around the Whack the Mole game. "You see girls," I started, "Whack the Mole is very similar to supply chain management. If you focus on whacking only one mole, then another mole will pop his head up in another part of the business. For example, if we whack the transportation mole, we may see the inventory mole pop its head up. "At this point, my oldest daughter stunned me by asking, "Are all the moles in business the same size, Daddy?" Needing time to think about her question, I refilled their cups with tokens and sent them back into the noise and fun.

As supply chain professionals, many of us spend significant amounts of time attempting to convince people to fight the urge to focus solely on transportation costs. We advocate that we should focus on total logistics cost. Total logistics cost is defined as the total cost associated with logistics, including purchasing, transportation, warehousing, ordering and inventory carrying costs. Many of us argue that to focus solely on transportation costs will sub-optimize the overall logistics network, resulting in an increase of overall total cost. For example, when we focus only on transportation costs, we can be assured that warehousing and inventory carrying costs will peak, most probably exceeding any gains we made in micromanaging transportation costs. Yet, do any of the components of total logistics costs play a more important role in the cost picture? That is, are any of the moles bigger than the others? This leads us to a discussion around transportation cost and developing ways to reduce transportation costs that will not simply drive up other costs in other areas of the business.

It is important to recognize that transportation cost increases may be perceived as unmanageable. Transportation capacity issues, fuel costs, globalization and homeland security all play a critical role in challenging logisticians to reduce transportation costs. Consequently, we need to understand how we can in fact manage and even reduce transportation costs in the current economic and business environment.

Focusing on Transportation Costs

Focusing on transportation cost reduction does not mean that we lose sight of managing total logistics costs. Transportation cost reduction and total logistics cost control are not mutually exclusive. Transportation cost reduction can be accomplished while also reducing inventories and



associated logistics costs. The key to reducing transportation costs rests in several axioms. Let's call these the Undisputable Laws of Transportation Cost Management.

The Undisputable Laws of Transportation Cost Management

The following five simple laws need to be considered when managing the transportation function. If these laws are ignored, we will continue to see transportation costs increase and service levels decrease.

These Transportation Laws are:

1. The Law of Transportation Strategy
2. The Law of Transportation Waste
3. The Law of Transportation Performance
4. The Law of Transportation Cost Structure
5. The Law of Transportation Daily Event Management

The Law of Transportation Strategy

Transportation strategy and execution should be coordinated with inventory strategies designed to support customer expectations. Inventory and customer strategies should not be a result of transportation strategies based on silo optimization of the transportation function.

The Law of Transportation Waste

All transportation is not waste and transportation can be used as a strategic differentiator. However, transportation in excess of what is necessarily required is waste and should be eliminated.

The Law of Transportation Performance

Transportation is not a commodity, since transportation providers and services are differentiated. Transportation service providers have distinct and measurable levels of performance capability; therefore, in transportation, you get what you pay for.

The Law of Transportation Cost Structure

Transportation cost is made of two distinct areas: unit costs and productivity costs. The significant opportunity for transportation cost reduction is in productivity costs. Focusing on unit costs will only result in creating instability of the transportation network.

The Law of Transportation Daily Event Management

Transportation cost reduction cannot be realized through infrequent transportation network designs. Real cost savings will only result from daily transportation event management and optimization of transportation requirement capacity and variability.

Using the Laws of Transportation Cost Management

Recognizing these laws as absolutes, we can develop a clear plan for reducing transportation costs. It is important to recognize these laws as part of a seamless process:

1. Develop a customer service strategy.
2. Develop an inventory strategy to support the customer service strategy.
3. Develop a transportation strategy to support the inventory strategy.
4. Value stream map the transportation function to isolate what portions of the transportation function are waste.
5. Eliminate transportation waste to reduce lead time and increase velocity to drive competitive

advantage.

6. Implement a transportation service provider base of high quality carriers whose superior performance will create a controlled, stable transportation network.
7. Negotiate competitive rates with quality carriers and then focus on productivity costs. Productivity costs include trailer utilization, overall miles run, packaging and quality costs and overhead costs relative to the transportation function.
8. Develop an internal engineering infrastructure to manage transportation costs on a daily, event-driven basis.
9. Implement a Plan, Do, Check, Adjust cycle around the transportation function in order to drive cost reduction in a thoughtful process of continuous improvement.

Getting It Done

To be sure, as supply chain professionals, we need to continue driving education and awareness relative to total logistics cost. However, current economic dynamics require a focus on transportation costs in order to maintain service levels and control overall cost structures. This is no easy feat, yet it is a process similar to any complex business process: it requires inputs, procedures, timing around those procedures and expected outputs. Also required are guiding principles that can be used as a true north to lead our discussions and decision-making processes. The Undisputable Laws of Transportation Cost Management can be used as these guiding principles.

Recognizing that techniques are available to focus on transportation cost reduction, we must not forget our game of Whack the Mole. As we thump one mole down, rest assured another will poke its head up. The challenge is to understand when and where the next mole will appear and whether it is bigger or smaller than the last one.