Logistics Cost and Service 2010
The Establish, Inc./Herbert W. Davis and Company Logistics Cost and Service Database was established in 1975 to:

- Define appropriate performance measures for logistics functions.
- Provide worksheets to record functional costs by facility and in total.
- Summarize the data received from participating companies and aggregate it into a useful database for benchmarking.
Today – 2010
North American Status

- Database of Logistics Cost and Service maintained and opened to all shippers to participate since 1975.
- Participation is achieved by completing a one-page questionnaire on our website.
- Each participant is sent a customized benchmark comparing cost and service performance to four peer groups:
  - Product category
  - Product value
  - Company size – sales revenue
  - Company size – shipped weight
Key Findings – 2010

What is happening in terms of logistics costs?

The Economy
- Many companies are still in a “wait and see” mode and are focusing on cost cutting instead of developing their supply chain as a competitive advantage.

Transportation
- Negotiating rates with providers to ensure the correct balance between cost, equipment availability and service.

Warehousing
- Many third-party providers are seeking longer commitments from clients to justify needed improvements in technology, as well as address deferred maintenance (applies to many asset-based companies).

Inventory
- Companies are beginning to hold more inventory with the low cost of capital and ocean capacity constraints, as well as dealing with extreme fluctuations in demand.

Administration and Oversight
- Purchasing functions appear to be the drivers in making decisions about supply chain changes.
The Hierarchy of Supply Chain Cost Factors

- Corporate Policies
- Supply Chain Policies
- Logistics Policies
- Logistics Procedures
- Logistics Practices
- Transportation Choices
Select Industries

Consumer Electronics
High-Value Industrial Durable
Computers
Peripherals
Telecommunications
Industrial Replacement Parts
Chemicals
Industrial Supplies
Consumer Replacement Parts
Small Appliances
Large Appliances
Publishers
Tires
Consumer Packaged Goods
Building Supplies/Hardware Products
Low-Value Consumer Packaged Goods

High-Value Consumer Packaged Goods
Grocery
Produce and Fresh Foods
Meat and Fish Products
Frozen Food
Beverages
Consumer Household Products
Health and Beauty Aids
High-Value Pharmaceuticals
Low-Value Pharmaceuticals
Industrial and Consumer Wholesalers/Distributors
Apparel Retailers
Drug Chains
Mass Merchandisers
Low-Value Industrial Durable
Logistics Cost – Percent of Sales by Industry Classification

Building Supplies
Grocery
Industrial Equipment
Healthcare
High Tech
Pharmaceuticals

Not to scale
Logistics Cost – Percent of Sales by Industry Classification

- Building Supplies
- Grocery
- Industrial Equipment
- Healthcare
- High Tech
- Pharmaceuticals

Database Average

Not to scale
### Average Company—2010 Database

<table>
<thead>
<tr>
<th>Service</th>
<th>% of Sales</th>
<th>$/CWT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>4.08%</td>
<td>$34.15</td>
</tr>
<tr>
<td>Warehousing</td>
<td>1.75%</td>
<td>$12.90</td>
</tr>
<tr>
<td>Order Entry/Customer Service</td>
<td>0.43%</td>
<td>$4.51</td>
</tr>
<tr>
<td>Administration</td>
<td>0.23%</td>
<td>$1.78</td>
</tr>
<tr>
<td>Inventory Carrying</td>
<td>1.79%</td>
<td>$14.63</td>
</tr>
<tr>
<td><strong>Total Logistics Costs</strong></td>
<td><strong>8.28%</strong></td>
<td><strong>$67.97</strong></td>
</tr>
</tbody>
</table>
Interpretation for Your Company

- When comparing your numbers to the overall average, it is often more important to look at the relationship between the numbers and not the actual value. This average includes all industries, many with much higher and lower cost characteristics. Any direct comparison with these numbers will be an “apples to oranges” comparison.

- Although your costs may be higher or in a different proportion does not necessarily make them bad. Benchmarking has as much to do with comparing the numbers as being able to explain the differences. “Our costs are higher because we provide a greater level of ____________” or “Our costs are lower because we ______________.”

- What strategies or investments have you undertaken to transform your costs, and have you conducted more in-depth analyses to validate them?
Cost Breakdown
Percent of Sales

- Transportation: 49%
- Inventory Carrying: 22%
- Administration: 3%
- Customer Service/Order Entry: 5%
- Warehousing: 21%
Product Value
Cost declines with higher value

Cost as a % of Sales

Product Value in $/Pound

<$1.50 | $1.50 - $5 | $5 - $15 | >$15

9.15 | 8.36 | 7.94 | 6.13

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Company Size
Small companies pay more

<table>
<thead>
<tr>
<th>Annual Sales ($ MM)</th>
<th>Cost as a % of Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$200</td>
<td>10.13</td>
</tr>
<tr>
<td>$200 - $500</td>
<td>7.04</td>
</tr>
<tr>
<td>$500 - $1,250</td>
<td>6.94</td>
</tr>
<tr>
<td>&gt;$1,250</td>
<td>6.60</td>
</tr>
</tbody>
</table>
Trend group average:

<table>
<thead>
<tr>
<th>Cost as a Percent of Sales</th>
<th>Cost per Hundredweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>+6.5%</td>
<td>+6.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sales</th>
<th>Total Costs in Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>-5.0%</td>
<td>+1.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weight Shipped</th>
<th>Product Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>-5.0%</td>
<td>-0.5%</td>
</tr>
</tbody>
</table>
Interpretation for a Hypothetical Company

*If you had the following characteristics…*

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Sales – millions</strong></td>
<td>$2,000</td>
<td>$1,895</td>
<td>-5.0%</td>
</tr>
<tr>
<td><strong>Weight Shipped – million lbs.</strong></td>
<td>500</td>
<td>475</td>
<td>-5.0%</td>
</tr>
<tr>
<td><strong>Product Value</strong></td>
<td>$4.00</td>
<td>$3.98</td>
<td>-0.5%</td>
</tr>
<tr>
<td><strong>Logistics Costs in $ – millions</strong></td>
<td>$200</td>
<td>$202</td>
<td>+1.0%</td>
</tr>
<tr>
<td><strong>Logistics Costs as a % of Sales</strong></td>
<td>10.0%</td>
<td>10.6%</td>
<td>+6.5%</td>
</tr>
<tr>
<td><strong>Logistics Costs per CWT</strong></td>
<td>$40.00</td>
<td>$42.53</td>
<td>+6.5%</td>
</tr>
</tbody>
</table>
Interpretation for Your Company

- The average company in our trend group saw an equal decline in sales dollars and weight shipped to customers. How do your sales and weight shipped compare to the group? Has the economy affected your industry differently or have you implemented other measures to mitigate your exposure?

- How has your overall budget changed? Were you able to implement any cost reduction measures, or did you improve your performance and competitive advantage?

- How has your strategy towards suppliers (warehousing, transportation, payment, forwarders, etc.) changed, are you focusing only on price or are collaboration and service still highly weighted?
## Logistics Cost Change

### 2010 versus 2009

<table>
<thead>
<tr>
<th></th>
<th>% of Sales</th>
<th>$/CWT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>+ 0.8%</td>
<td>+ 0.4%</td>
</tr>
<tr>
<td>Warehousing</td>
<td>+ 6.2</td>
<td>+ 5.5</td>
</tr>
<tr>
<td>Order Entry/Customer Service</td>
<td>+ 7.7</td>
<td>+ 6.8</td>
</tr>
<tr>
<td>Administration</td>
<td>- 8.1</td>
<td>- 8.7</td>
</tr>
<tr>
<td>Inventory</td>
<td>+ 21.1</td>
<td>+ 20.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>+ 6.5%</strong></td>
<td><strong>+ 6.5%</strong></td>
</tr>
</tbody>
</table>
Annual Functional Cost Change
(Percent of Sales)

- Warehousing
- Inventory
- Transportation

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Several Database Trends are Evident

- Logistics costs have increased considerably from 2009 to 2010. Transportation, which normally accounts for half of logistics costs, has remained flat in 2010, with many companies focusing their efforts on the single, largest expense.

- Overall, the past year has not been a good one for logistics costs and service. Many companies are experiencing extreme fluctuations in demand, making capacity planning and forecasting even more difficult.
Logistics Cost—Percent of Sales
Logistics Cost—Percent of Sales

Last Five Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Logistics Cost—Percent of Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>6.5</td>
</tr>
<tr>
<td>2007</td>
<td>6.5</td>
</tr>
<tr>
<td>2008</td>
<td>6.5</td>
</tr>
<tr>
<td>2009</td>
<td>7.5</td>
</tr>
<tr>
<td>2010</td>
<td>8.0</td>
</tr>
</tbody>
</table>
Why are Overall Costs Rising?

The average company in our trend group has incurred a cost increase in almost every cost category except administration and oversight.

- Not all increases are necessarily negative. There has been an uptick in warehouse technology improvements in both internal and external operations. These are physical assets and have a capacity based on size and technology. During periods of slower demand, it is easier to justify a disruption to improve operations.

- More companies are shifting to include more direct to consumer order fulfillment adding to the single SKU, single item orders.

- Increases in inventory are easier to justify with a lower cost of capital and capacity constraints in importing products. With lower returns investing elsewhere, companies are “betting” on themselves.

- Companies continually focus on ways to reduce transportation costs by changing modes, negotiating rates and passing on more transportation costs to the customer (when possible). For the first time, many companies are leveraging their total volumes.
Customer Service Levels

**Definition**
- The prompt and complete delivery of goods ordered

**Measurements**
- Prompt = 7.0 days total order cycle time
- Complete
  - Orders 92%
  - Lines 95%
  - Units 95%
# Average Performance Reported

<table>
<thead>
<tr>
<th></th>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Cycle Time</strong></td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td><strong>Product Availability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(% Orders)</td>
<td>87</td>
<td>88</td>
<td>85</td>
<td>91</td>
<td>88</td>
<td>84</td>
<td>83</td>
<td>90</td>
<td>91</td>
<td>92</td>
</tr>
<tr>
<td>(% Lines)</td>
<td>92</td>
<td>95</td>
<td>91</td>
<td>94</td>
<td>92</td>
<td>89</td>
<td>93</td>
<td>92</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td>(% Cases)</td>
<td>90</td>
<td>93</td>
<td>93</td>
<td>91</td>
<td>94</td>
<td>90</td>
<td>94</td>
<td>94</td>
<td>95</td>
<td>95</td>
</tr>
</tbody>
</table>
1. Strongest forces *driving decisions* in logistics.

2. Most pressing issue in *managing* a logistics organization.

3. Most pressing issue in *operating* logistics functions.

4. Most difficult *customer service requirement*.

5. Most recent changes in *logistics network*.

6. Most recent *change in systems* that support logistics.
The Answer to Almost Every Question WAS....
Strongest Forces *Driving Decisions* in Logistics

![Bar Chart: % of Responses over Years]

- **Cost**:
  - 2010: 70%
  - 2009: 20%
  - 2008: 5%
  - 2007: 3%
  - 2006: 2%

- **Service/Customer Satisfaction**:
  - 2010: 90%
  - 2009: 60%
  - 2008: 40%
  - 2007: 30%
  - 2006: 20%

- **Velocity Increases**:
  - 2010: 40%
  - 2009: 30%
  - 2008: 20%
  - 2007: 10%
  - 2006: 5%

- **Globalization/Future Growth**:
  - 2010: 10%
  - 2009: 5%
  - 2008: 2%
  - 2007: 1%
  - 2006: 0%

- **Other**:
  - 2010: 5%
  - 2009: 3%
  - 2008: 1%
  - 2007: 0%
  - 2006: 0%

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Most Pressing Issue in *Managing* Logistics

- Costs
- Transportation Capacity
- Data Visibility and Actionability
Most Pressing Issue in *Operating* Logistics Functions

- Controlling and reducing costs.
- Managing complexity and variability.
Most Difficult Customer Service Requirement

- Extended payment terms and charge backs.
- Mass customization while reducing costs.
- Labeling and packaging requirements.
- Delivery requirements (carriers, appointments, etc.).
Most Recent Changes in Your Logistics Network

% of Responses

- Plant/DC Rationalization
- New DC
- Software
- Other (Staffing)
- Sourcing Change
- None


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Most Recent Change in **Systems** that Support Logistics

% of Responses

![Bar Chart](chart.png)

```
<table>
<thead>
<tr>
<th>Year</th>
<th>ERP</th>
<th>Forecasting/Visibility</th>
<th>TMS</th>
<th>WMS</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```
What are Most Companies Doing to Reduce Costs?

- Improving their internal product and information flows to achieve quick wins.
- Benchmarking costs and practices to help identify areas for improvement.
- Negotiating with Transportation Providers.
- Focusing on tactical projects as companies are still trying to survive.
Improving Flows

Most flow improvement projects have a relatively short payback period.

- Many companies are finding that their inbound production/receiving rates no longer match their outbound order characteristics, causing bottlenecks in their facilities.
- Inventory turns are being highly scrutinized and evaluated.
- Investments are being made in “newer” technologies to improve inventory accuracy and improve productivity.
- System upgrades are being implemented to eliminate older “work around” methods.
Benchmarking

Two distinct benchmarking groups:

1. The company that just wants to be told they are the “best”, which is difficult when only the 25% are considered best-in-class. There is a 75% chance you are not best-in-class.

2. The company that is interested in improving and further investigating the options; and wants to gain insight on where to focus their efforts and quantify the opportunities.
Carrier Negotiations have an almost immediate payback.

- Companies are trying to leverage all of the spends to obtain the lowest possible rates (companies with multiple business units are now being forced to work together).
- Companies are taking a hard look at their internal procedures, the way they pack and tender freight, and are in more of a selling mode to the carriers. Several carriers are experiencing significant growth in specific areas and are pricing freight high as a means of turning it down.
- UPS and FedEx are taking a hard stance against using any outside assistance when negotiating small parcel rates.
Strategic Projects

Strategic projects generally have a longer payback period.

- Companies are modeling more on an as-needed basis, if a lease/service agreement is expiring or as an alternative to an overflow facility.

- Many companies have shifted away from trying to improve their competitive advantage and are still in a survival mode.
In Summary

- The average company in 2010 has logistics costs of 8.28 percent of sales.
- Year-over-year costs rose in 2010 from 2009.
- Most companies are focusing on:
  - Immediate cost reductions and control.
  - Flexibility – is still mentioned but is often sacrificed.
  - Transportation – although only modestly increased in 2010 is still a major focus for most companies.
How to Participate

- Fill out a **short** one-page input sheet on line.
- No charge for initial comparison.
- Confidentiality of your data is assured.
- Participants receive custom benchmarks:
  - Percent of annual sales
  - Cost per hundredweight
  - Five cost categories: transportation, warehousing, customer service/order entry, inventory carrying, and administration
  - Averages and quartiles are provided
  - Benchmarks based on product value, weight and revenue
  - Customer service performance
## Your Company’s Volume and Cost Information

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Your Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data submitted by:</td>
<td>Contact Information</td>
</tr>
<tr>
<td>Received on:</td>
<td>10/1/2008</td>
</tr>
<tr>
<td>For 12 Months Ending:</td>
<td>12/31/2007</td>
</tr>
</tbody>
</table>

### Size of Business:

<table>
<thead>
<tr>
<th>Net US Sales Dollars</th>
<th>$2,000,000,000</th>
<th>Percent of Sales on which Freight is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight Shipped to Customers</td>
<td>500,000,000</td>
<td>Paid by You</td>
</tr>
<tr>
<td>Number of Shipping Points</td>
<td>2</td>
<td>Paid by Customer</td>
</tr>
<tr>
<td>Number of Lines</td>
<td>255,000</td>
<td>Picked Up by Customer</td>
</tr>
<tr>
<td>Number of Orders</td>
<td>100,000</td>
<td>Without Allowance</td>
</tr>
</tbody>
</table>

### Transportation Cost Terms to Customers:

<table>
<thead>
<tr>
<th>Percent of Sales</th>
<th>Cost per Cut Shipped</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%</td>
<td>80%</td>
</tr>
<tr>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
</tr>
</tbody>
</table>

### Logistics Costs:

<table>
<thead>
<tr>
<th>Spend ($)</th>
<th>Percent of Sales</th>
<th>Cost per Cut Shipped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>$90,000,000</td>
<td>4.50%</td>
</tr>
<tr>
<td>Warehousing</td>
<td>$42,000,000</td>
<td>2.10%</td>
</tr>
<tr>
<td>Order Processing</td>
<td>$20,000,000</td>
<td>1.00%</td>
</tr>
<tr>
<td>Administration</td>
<td>$8,000,000</td>
<td>0.40%</td>
</tr>
<tr>
<td>Inventory Carrying</td>
<td>$46,000,000</td>
<td>2.30%</td>
</tr>
<tr>
<td>Total Costs</td>
<td>$208,000,000</td>
<td>10.00%</td>
</tr>
</tbody>
</table>
### B. By Product Value

Your company compared to companies with similar product value.

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Your Company</th>
<th>Competitor 1</th>
<th>Competitor 2</th>
<th>Competitor 3</th>
<th>Global Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel and Route Optimization</td>
<td>1.29</td>
<td>1.10</td>
<td>1.35</td>
<td>1.20</td>
<td>1.33</td>
</tr>
<tr>
<td>Administrative &amp; Support</td>
<td>0.87</td>
<td>0.78</td>
<td>0.99</td>
<td>0.85</td>
<td>0.90</td>
</tr>
<tr>
<td>Material Costs</td>
<td>0.25</td>
<td>0.20</td>
<td>0.29</td>
<td>0.23</td>
<td>0.25</td>
</tr>
<tr>
<td>Total Costs</td>
<td>2.45</td>
<td>2.08</td>
<td>2.63</td>
<td>2.33</td>
<td>2.53</td>
</tr>
</tbody>
</table>

*Note: The table above compares your company's costs to competitors and the global median for the same product categories.*
### C. By Volume

Your company compared to companies with similar volume (weight shipped).

<table>
<thead>
<tr>
<th>Category</th>
<th>Your Company</th>
<th>Lower Quartile</th>
<th>Upper Quartile</th>
<th>Average</th>
<th>Best</th>
<th>Worst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Order Processing</td>
<td>6.60</td>
<td>4.56</td>
<td>9.16</td>
<td>7.45</td>
<td>5.48</td>
<td>13.69</td>
</tr>
<tr>
<td>Warehousing</td>
<td>2.85</td>
<td>2.60</td>
<td>3.67</td>
<td>3.00</td>
<td>2.04</td>
<td>4.15</td>
</tr>
<tr>
<td>Order Processing</td>
<td>6.60</td>
<td>5.14</td>
<td>8.54</td>
<td>6.94</td>
<td>5.03</td>
<td>9.95</td>
</tr>
<tr>
<td>Just-in-Time</td>
<td>6.60</td>
<td>2.46</td>
<td>6.16</td>
<td>4.03</td>
<td>2.04</td>
<td>8.15</td>
</tr>
<tr>
<td>Inventory Planning</td>
<td>2.85</td>
<td>1.46</td>
<td>3.14</td>
<td>2.14</td>
<td>1.15</td>
<td>3.85</td>
</tr>
<tr>
<td>Total Costs</td>
<td>12.45</td>
<td>7.75</td>
<td>17.33</td>
<td>12.45</td>
<td>7.75</td>
<td>17.33</td>
</tr>
</tbody>
</table>

### Chart Description

- The chart compares your company's performance in various logistics categories to the best and worst performers among similar-sized companies.
- The data includes metrics such as purchase order processing, warehousing, order processing, just-in-time delivery, and inventory planning.
- The table shows the minimum, average, and maximum values for each category.