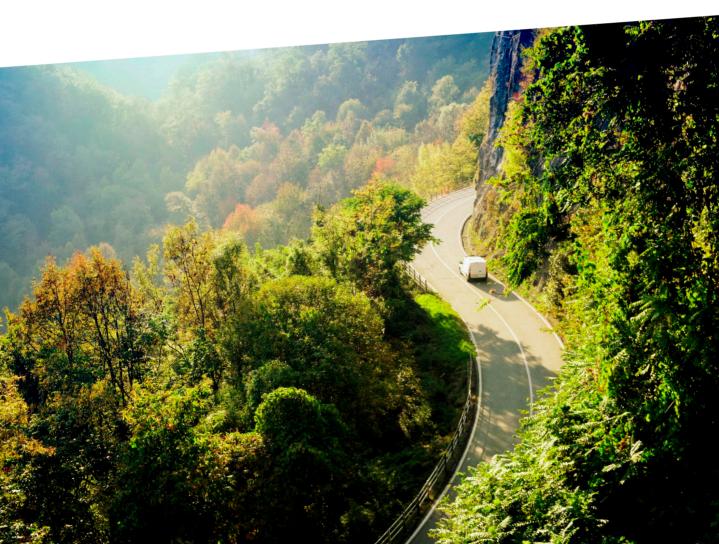
STATE OF LOGISTICS REPORT

authored by ATKearney



Cresting the Hill

Executive Summary



The Steep Grade Starts to Crest in 2018

The strong seller's market that carried over from 2017 well into 2018 began to weaken in the second half of the year as capacity started to catch up with demand and the quarter-on-quarter pace of GDP growth began to slow. Partially thanks to trade and tariff disputes that drove US inventory buildups in the second half of 2018, and despite dramatically rising costs for drivers and warehousing staff, logistics providers managed to complete the year with generally excellent results and cautious optimism for 2019. Conversely, shippers hoped for redress after what for most was the worst year in memory in terms of cost and capacity availability. At the halfway point in 2019, signs of slowdown and talk of recession are abundant but in-year rate cuts and other forms of economic stimulus may be on the way.

United States Business Logistics Costs (USBLC) rose 11.4 percent last year to reach 8.0 percent of GDP, a jump of 50 basis points over 2017 (see figures 1 and 2). Key indicators suggest that the economic momentum that lifted GDP 2.9 percent last year will wane with swollen retail and wholesale inventories being depleted and corporations turning cautious in the short term, while the IMF predicts lower US growth in the coming years. Although developments in the second half of 2018 brought some relief to the capacity shortages and price increases, by the end of Q1 2019, consumer confidence and spending had rebounded from end-of-2018 declines, and quarterly GDP growth turned in a robust 3.1 percent growth rate. That's why we name this year's report Cresting the Hill.

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For company leaders, the temptation to see the shoe as being on the other foot and claw back the 2018 rate increases is powerful (and in some cases baked into 2019 logistics budgets). Cautious carriers have been making concessions and have cut back on capacity plans. At the crest of this hill, we see both hope and evidence of a better road being taken. Leading shippers looking to control logistics costs have leaned more in the direction of constructive engagement and innovation than ever before, and carriers have been pleased with the new collaboration while themselves opening up to start-ups and new technologies for novel solutions to transportation challenges. You will see that evidence in these pages; we hope you will share your own experiences with the authors.

A closer look at 2018 numbers shows rising costs across all USBLC components: transportation, inventory-carrying costs and other expenses. Inventory led the way with a 14.8 percent overall cost increase on a 4.6 percent rise in year-over-year inventories as trade-tension buildups met declining demand. While transportation costs fared better with a 10.4 percent increase, certain modes saw big jumps. For example, Intermodal and private fleets jumped 28.7 percent and 13.1 percent, respectively, as shippers sought alternatives to common carriers and the Postal Service powered up 9.7 percent as the big volume winner in last mile.

Figure 1 **US business logistics costs increased in 2018**

US business logistics costs

\$ billion)	2018	YoY 18/17	5-yr. CAGR
Transportation costs			
Full truckload	296.1	7.6%	3.6%
Less-than-truckload	71.8	8.3%	3.5%
Private or dedicated	300.9	13.1%	7.1%
Motor carriers	668.8	10.1%	5.1%
Parcel	104.9	8.7%	8.0%
Carload	61.4	7.2%	-0.6%
Intermodal	27.0	28.7%	8.1%
Rail	88.4	12.9%	1.6%
Air freight (includes domestic, import, export, cargo, and express)	76.5	9.2%	3.8%
Water and ports (includes domestic, import, and export)	45.7	12.8%	1.5%
Pipeline	53.0	12.7%	12.7%
Subtotal	1,037.4	10.4%	5.1%
Inventory carrying costs			
Storage	153.1	3.2%	3.0%
Financial cost (WACC x total business inventory)	192.5	26.0%	3.0%
Other (obsolescence, shrinkage, insurance, handling, others)	148.1	14.8%	3.0%
Subtotal	493.7	14.8%	3.0%
Other costs			
Carriers' support activities	52.3	10.3%	4.5%
Shippers' administrative costs	52.1	2.8%	5.3%
Subtotal	104.4	6.4%	4.9%
Total US business logistics costs	1,635.46	11.4%	4.4%

Note: YoY is year-on-year. WACC is weighted average cost of capital. Source: CSCMP's 30th Annual State of Logistics Report (see report Appendix)

Every Sector Has a Good Year

Despite the warning signs in the second half of 2017, shippers were caught by surprise by the severity of the spot market freight rate jumps in the first half of 2018 while carriers saw significant spot rate drops in the latter half of the year. Since contract rates lag spot rates by three to six months, shippers with longer term contracted rates suffered less in 2018 but brokers that had extended contracted rates found themselves upside-down on many contracts, struggling to renegotiate them as the owner-operators and smaller fleets they depended on demanded fatter payments. Railroads did particularly well on intermodal as shippers sought alternatives to trucks; rail productivity continued to improve as the Class 1 railroads that adopted "precision railroading" principles achieved ever-lower operating ratios.

In the parcel/last-mile space, Amazon continued to raise and train expectations to counteract brick-and-mortar advantages for compressed delivery windows, generating significant excitement for some and challenges for many. Not a day goes by without news about a counter-move, a tech-enabled innovation, or an enhanced standard to serve customers. In many aspects, traditional carriers responding to Amazon's steady growth as a logistics provider are re-thinking relationships. For now, players have not become overly aggressive, because double-digit volume growth in e-commerce and an urgent need for solutions have helped make ends meet for most companies. Before the infrastructure to support last-mile economics is fully in place, however, pioneers will need to shed the mindset of per-shipmentbased freight cost recovery, and instead utilize item baskets and membership models. While the industry embraces challenges, we have entered an era of collaboration, flexible alliances, and innovation, and the discernable winner at this point is the consumer.

Air freight prices increased 9.2 percent in 2018, even as capacity grew faster than demand. Volumes stagnated at the end of the year, and demand growth is expected to slow in 2019. On the other hand, e-commerce—and consumer demands for quick delivery—continues to fuel a positive outlook.

Water carriers took advantage of high pre-tariff demand to implement pricing discipline, resulting in record-high ocean shipping rates. Although the 2019 demand was expected to ease, initial reports on contract negotiations nevertheless indicated double-digit gains for carriers. Uncertainty surrounding the IMO 2020 sulfur regulations, which will be implemented on January 1, 2020, cloud the longer-term picture.

In the pipeline sector, recent investments have helped pipeline capacity catch up to surging oil and gas production. Gas from the Marcellus shale formation increasingly fuels electricity generation, and export demand increases for oil from the Permian Basin.

Freight forwarders remain profitable, thanks to a focus on customer service amid continually rising levels of trade. In 2018, DSV acquired Panalpina, and CMA CGM acquired CEVA, but further consolidation seems likely in the fragmented industry. Potentially disruptive forces include the start-up Flexport, the transformation of Amazon, and growing climate concerns among customers.

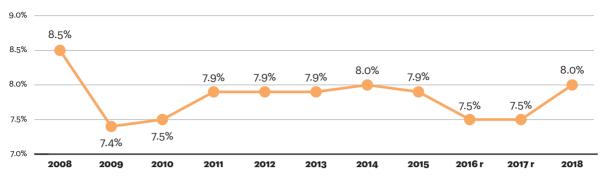
In 3PL, cost pressures and last-mile challenges are creating increasing demand for solutions and elevating some providers to a more strategic role. Emerging technological solutions will surely play a role in the sector's future path—but so will an ability to nurture trusted relationships with customers.

US industrial warehouse/distribution net absorption rose 16.8 percent over the previous year to an all-time high of 284.9 million square feet (msf) in 2018. It has now registered over 240 msf for five consecutive years—the strongest run on record. The national industrial vacancy rate declined slightly to 4.8 percent for all product types in 2018—a new historic low—with market conditions tightening slightly in the Northeast, Midwest, and South. Average asking rents for all industrial products across the US reached a new nominal high of \$6.14 per square foot (psf). In short, despite increases in supply, voracious demand and limited space options caused record-low vacancy rates and fueled rent growth. E-commerce is creating demand for smaller, urban warehouses, as shippers try to keep inventories close to customers for fast delivery. The increasing demand for speedy deliveries, combined with tight space and high labor costs, is prompting investments in new technologies.

In early development, blockchain technologies continue to offer hope for improving data transparency and data sharing—thus overcoming some of the greatest inefficiencies in logistics today. Although varied players are developing intriguing potential solutions, achieving block-chain's benefits will require scale; thus, achieving widespread participation remains an obstacle.

This year's report adds a section on the 5G mobile broadband and communication standard, which promises to transform the industry. In the short term, it will help create an information-rich environment that will improve operational efficiency. In the long term, its support for solutions such as robotic picking-and-packing and AI-based planning will fundamentally change how business is done.

Figure 2 USBLC as percent of nominal GDP



Note: r means revised; see Appendix for details Source: A.T. Kearney analysis

2019 and Beyond: An Opportunity to Break the Cycle

We are striking an optimistic tone with this year's theme: Cresting the Hill. With the current mixed economic and trade outlook, there is evidence for almost any perspective:

- The current expansion has now reached a record as the longest-running period of consecutive economic growth in US history
- In that same history, every expansion has been followed by a contraction, and the longer the growth, the longer the period of pain; it's easy to find economists forecasting recession
- The current administration is publicly determined to sustain growth, and the Federal Reserve has reversed course over the last six months from a language of rate increases to hinting the opposite may be in store

While shippers and carriers can neither predict the direction of the next move in the economy nor its timing or intensity, they know that they each bear responsibility for some of the pain of the past and that remedies are available to them. This report explores some of those remedies that are being adopted today, which include:

- Implementing shipper of choice programs to improve the carrier experience and the efficient deployment of their assets
- Investing in position-sensing technologies that enable more effective allocation and utilization of assets by logistics operators and the software that supports them
- Al and machine-learning algorithms that make brokerages more efficient at serving their customers and matching drivers to loads
- Advancing collaborative optimization techniques in logistics sourcing and network design that fully leverage the power of early carrier and 3PL consultation
- Collaborative contracts between shippers and carriers seeking to increase the sustainability and utilization of the assets in use
- Shared economy concepts and applications that make better use of last-mile drivers and contract logistics spaces

As we predicted over the last two years, uncertainty became a steep grade. Carriers and shippers faced a choice: to either slog through it with conventional tactics or engage with opportunities to do something different, something better. More and more are trying the latter approach and are reaping the rewards. As this latest hill is crested and the players in the industry can see forward to how the next ones will test them, the rewards will go to those that seek bold new solutions.

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To read the full report, please visit: <u>bit.ly/AnnualStateofLogistics</u>

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