Restart: The Business of Warehousing in North America in the Post-Pandemic Era

Market Size, Major 3PLs, Benchmarking Costs, Prices and Practices

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ABOUT ARMSTRONG & ASSOCIATES, INC.

Armstrong & Associates, Inc. (A&A) was established in 1980 to meet the needs of a newly deregulated domestic transportation market. Since then, through its leading Third-Party Logistics (3PL) market research and history of helping companies outsource logistics functions, A&A has become an internationally recognized key resource for 3PL market information and consulting.

A&A's mission is to have leading proprietary supply chain knowledge and market research not available anywhere else. As proof of our continued work in supporting our mission, A&A's 3PL market research is frequently cited in media articles, publications, and securities filings by publicly traded 3PLs. In addition, A&A's email newsletter currently has over 88,000 subscribers globally.

A&A's market research complements its consulting activities by providing continually updated data for analysis. Based upon its unsurpassed knowledge of the 3PL market and the operations of leading 3PLs, A&A has provided strategic planning consulting services to over 40 3PLs, supported 24 closed investment transactions, and provided advice to numerous companies looking to benchmark existing 3PL operations or outsource logistics functions.

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 Table 2. A&A's Top 50 VAWD 3PLs by Warehousing Space within North America - 2022

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Warehouse Management Systems (WMS)

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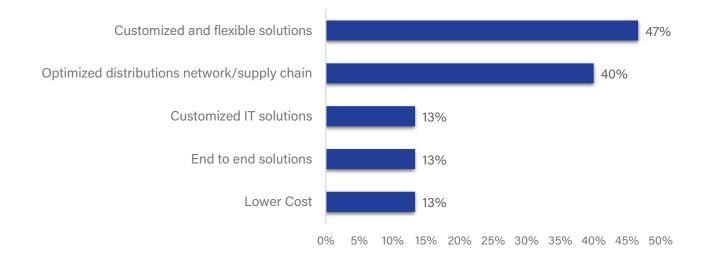
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Below are some of the 3PLs' comments:

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The five critical areas below are attributes of leading 3PL VAWD operations.

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North American Warehousing Study 2022 - General Questionnaire

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We are updating our North American Warehousing database and would appreciate your participation. Your input is critical to developing a realistic picture of the current post-pandemic warehousing market. The reliability of the resulting metrics depends on your accurate responses. The following study includes questions used to build upon our existing database, as well as new questions about the market and your company's experience. Individual company responses are not shared. We combine responses to develop important market benchmarks and insights. Please provide complete responses to the following questions.

1. What important changes, trends, and challenges have you seen in the warehousing business in the last 2-3 years?

Changes:	
Trends:	
Challenges:	

2. How much did your business change from 2020 to 2021? What's your expected warehousing revenue for 2022?

Total warehousing revenue 2020 (\$M)

Total warehousing revenue 2021 (\$M)

Total expected warehousing revenue 2022 (\$M)

3. What percent of your total warehousing revenue in 2021 is from e-commerce warehousing/fulfillment?

a. Percent of total e-commerce warehousing revenue which is business-to-consumer (B2C):

b. Percent of total e-commerce warehousing revenue which is business-to-business (B2B):

4. What percent of your total revenue is from e-commerce transportation management (parcel/freight)?



North American Warehousing Study 2022 - General Questionnaire

5. What percent of your total net revenue (without purchased transportation) came from the following functions?

Function	Net Revenue %	Space %
Dedicated Contract Warehousing - Dry/Ambient		
Contract Packaging - Dry/Ambient		
Multi-Client Contract Warehousing - Dry/Ambient		
Multi-Client Public Warehousing - Dry/Ambient		
Dedicated Contract Warehousing - Refrigerated or Frozen		
Contract Packaging - Refrigerated or Frozen		
Multi-Client Contract Warehousing - Refrigerated or Frozen		
Multi-Client Public Warehousing - Refrigerated or Frozen		
Total	0.0%	0.0%

6. What is your overall I.T. cost as a percent of total warehousing costs?

What is your estimated I.T. cost growth from 2020 to 2021?

What is your estimated robotic/automation cost as a percentage of total IT cost?

Refrigerated/Frozen

7. Based upon feedback from your customers, what differentiates your service offering from the competition?

8. Are you planning on adding warehousing operations to your network over the next 3 y
--

Dry/Ambient

Number of Warehouses Estimate
Total Square Footage Estimate

9. Please rank the level of your organizations maturity in each area below with 1 being the lowest and 5 being highest. (Hover over each box for commentary.)

onnentary.)

- A. Safety
- B. People, Talent Management
- C. Technology
- D. Continuous Improvement
- E. Quality Program

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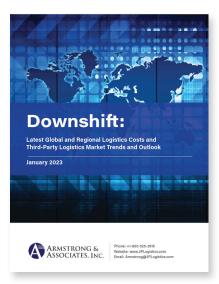
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Downshift: Latest Global and Regional Logistics Costs and Third-Party Logistics Market Trends and Outlook

This report provides Global Third-Party Logistics Market and Logistics Cost estimates from 2016-2025. Besides that, the report also covers revenues and growth rates by region and country and by 3PL segments including the Global Spare/Service Parts Logistics and Time-Critical Delivery Markets for the same years, the Top 50 Global 3PLs and their competitive differentiation, among other trends and changing 3PL requirements to further minimize supply chain risk.

This report is part of A&A's premium market research Expert Information Service (E.I.S.). This report is downloadable as an Adobe PDF file with a single user license.



Making it Count: Big and Bulky Last-Mile Delivery in the U.S. - 2022

The National Home Delivery Association (NHDA) and Armstrong & Associates, Inc. (A&A) partnered for this study covering the Third-Party Logistics (3PL) Big and Bulky U.S. Last-Mile Delivery Market to identify current market size, historical growth and outlook, key providers, customers and verticals served, e-commerce's role, employment, and other trends. For the study, we utilized two separate surveys and public information. The surveys were sent to NHDA members and other U.S. last-mile delivery thirdparty logistics providers (3PLs).

This report is part of A&A's premium market research Expert Information Service (E.I.S.). (Note: This report is downloadable as an Adobe PDF file with a single user license.)



Co-Managing the Turbulence: Trends in 3PL Customer Relationships - 2023

This report is an expanded update of Armstrong & Associates' best-selling report covering the various trends between third-party logistics providers (3PLs) and the customers they serve. From its analysis of over 8,400 current 3PL customer relationships in 44 countries, totaling nearly 22,000 services, the report identifies and details key trends in outsourced "3PL" customer relationships. Armstrong & Associates has been tracking and analyzing customer relationships in the 3PL market for over a decade with ever-increasing detail.

This report is part of A&A's premium market research Expert Information Service (E.I.S.). (Note: This report is downloadable as an Adobe PDF file with a single user license.)