Warehousing and Storage Services

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SIC: 4221, 4222, 4225, 4226

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Table of Contents

1. Coronavirus Update
2. Industry Structure
3. How Firms Operate
4. Industry Trends
5. Credit Underwriting and Risks
6. Industry Forecast
7. Working Capital
8. Capital Financing
9. Business Valuation
10. Financial Benchmarks
11. Bank Product Usage
12. Quarterly Insight
13. Industry Terms
14. Web Links
15. Related Profiles

Coronavirus Update

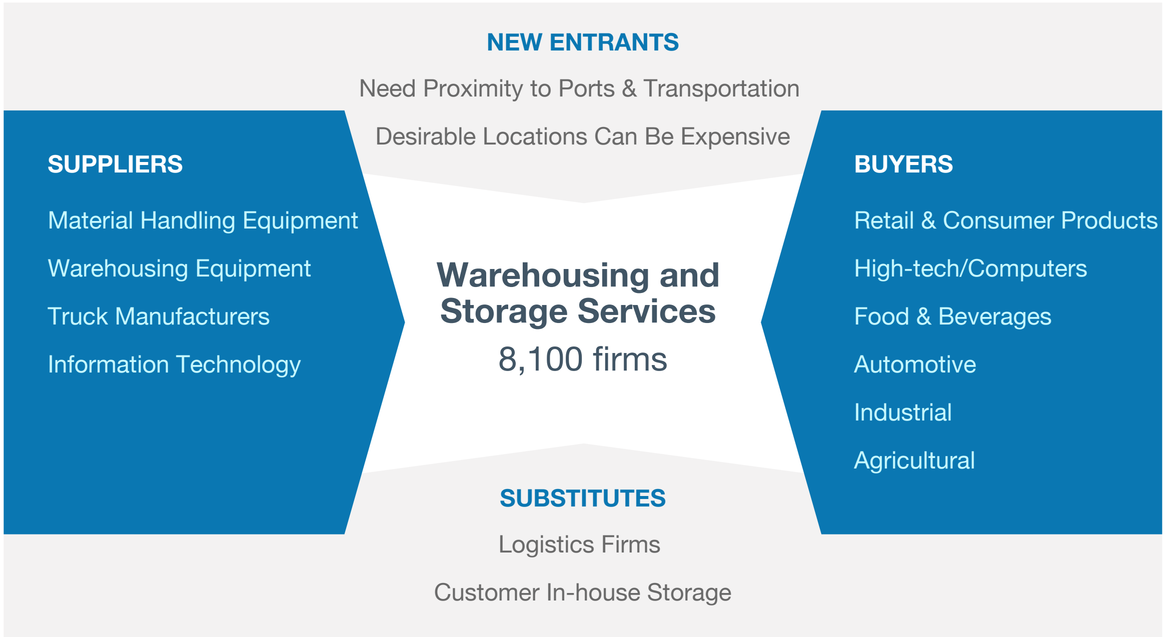
Jan 14, 2022 -- Warehouse Lease Prices Skyrocket as Space Comes Off-Lease

- US wholesale sales, a key demand indicator for warehousing, rose a seasonally adjusted 23.3% in November 2021 compared to the same month in 2020. Durable goods sales rose 14.1% in November on a year-over-year basis, while nondurables were up 32.4%. November's total wholesale sales rose 1.3% compared to October. Durable goods sales increased 0.6% month-over-month in November, and nondurables were up 2%. In December, inflation rose 7% compared to year-earlier levels and grew at the fastest pace since 1982. In December, nearly half of US small businesses said they planned to increase their prices in the next three months, according to the National Federation of Independent Businesses. A labor shortage has pushed up labor costs, prompting businesses to increase their prices. Supply chain disruptions and bottlenecks have also driven prices higher.
- Warehousing capacity is tight, according to the January Logistics Manager's Index (LMI) report. The LMI was 70.1 in December, down 3.3 points from the prior month. A reading above 50 indicates logistics expansion, while below 50 suggests a contraction. December's warehousing utilization index fell 0.9 points to 67.3, while the warehousing capacity index rose to 2.5 points 46.5. While warehouse utilization loosened and capacity increased, warehousing prices eased downward but remained high. The warehousing price index reading in December was 82.1, down 8.2 points from November. For December's LMI report, those surveyed were not optimistic about sufficient warehousing capacity coming online; they also believed warehousing utilization would continue to grow. With demand outstripping supply, LMI respondents believe warehousing prices will continue to go up well into 2022. The LMI is compiled monthly by logistics researchers at five universities and the Council of Supply Chain Management Professionals (CSCMP).
- Industry watchers suggest the shift away from brick-and-mortar retail that took hold during the lockdown will remain even as the pandemic eases and almost all of the country has reopened. This is expected to increase long-term demand for warehousing space that large e-commerce retailers rent for use as fulfillment centers. To meet the increase in demand stemming from e-commerce growth, the US may need as many as 1 billion additional square feet of US warehouse space by 2025, according to commercial real estate services firm JLL. E-commerce requires three times the warehousing and logistics space as brick-and-mortar retail, according to logistics real estate firm Prologis.
- As warehouse space has tightened due to solid consumer spending and e-commerce growth during the pandemic, warehouse lease rates are rising, according to The Wall Street Journal. Industrial property lease prices are up 25% for five-year leases that expired in 2021, according to a December report by real estate firm CBRE. The national vacancy rate for industrial property dropped to 3.6% in the third quarter of 2021, marking the lowest level since 2002, according to CBRE. Warehouse space is even tighter for major distribution hubs like Southern California's Inland Empire, where the vacancy rate was below 1% in Q3.
- The pandemic has exposed the vulnerability of far-flung, complicated global supply chains. Supply chain diversification is expected to lead companies to move some activities out of China, possibly creating demand for additional warehousing capacity in the US. Nearly 85% of procurement professionals at North American manufacturing firms are likely or extremely likely to reshore some of their supply chains, according to a June 2021 report released by Thomas, a provider of supplier and product sourcing services. A substantial majority of survey respondents plan to reshore some operations despite some challenges in doing so, including price and speed.
- The popularity of online grocery shopping has accelerated during the coronavirus pandemic, and the category is expected to boost demand for climate-controlled warehousing space, according to Commercial Property Executive. Most online grocery fulfillment occurs in retail grocery locations, which is likely a temporary solution. As the online grocery segment grows, more fulfillment is expected to move to warehouse locations that are more efficient and cost-effective. Because cold storage facilities are three times as costly to build, such projects, historically, are rarely built on spec. However, the need for last-mile cold-storage fulfillment in large urban centers is attracting speculative warehouse investment, according to The New York Times.
- In January, a COVID-19 outbreak at the ports of Los Angeles and Long Beach again slowed the clearing of a logjam of containerships waiting off the West Coast to unload, according to The Wall Street Journal. As of January 10, about 10% of the workforce at the LA and Long Beach ports was away from work due to COVID-19-related reasons, according to the Pacific Maritime Association. Fueled by the Omicron variant, port worker infections have risen sharply. More than 100 containerships were waiting off the coast on New Year's Day. Before the pandemic, it was unusual for more than one ship to wait for unloading. Omicron is also spreading in China, which has led to factory shut-downs and disruption of port operations, according to The Wall

Street Journal. Logistics industry watchers are worried that China's zero-tolerance policy for containing the pandemic could trigger more significant disruptions throughout the world economy.

- On September 9, the Biden Administration announced that businesses with 100 or more employees would have to require their workers to be vaccinated or be subject to at least weekly COVID-19 testing. The requirement was to be implemented through a temporary standard issued by the Labor Department's Occupational Safety and Health Administration (OSHA). On November 6, the 5th US Circuit Court of Appeals temporarily blocked the OHSA rule due to potential "grave statutory and constitutional issues." More than two dozen states, business groups, individual businesses, labor unions, and religious organizations sued to block the OSHA rule. Due to lawsuits in several circuit courts, federal law required them to be consolidated and heard in a single court chosen by lottery. In mid-November, the lottery was held, and the case was set to be heard in the Sixth US Circuit Court of Appeals. On December 17, the Sixth US Circuit Court of Appeals overturned the lower court's ruling, and some businesses immediately appealed the ruling to the Supreme Court. On January 13, the Supreme Court blocked the vaccine requirement for companies with 100 or more employees. Of about 8,150 warehousing and storage firms in the US, 2,350 (or about 29%) have 100 employees or more, according to the US Census Bureau.
- The self-storage industry has seen strong growth during the pandemic as Americans stored items to make room for home offices, moved home from college, or changed residences, according to The Wall Street Journal. Businesses also rented storage space to stock up on extra inventory. Since just before the pandemic, shares in the FTSE Nareit All Equity REITs Index have returned nearly 85% on price gains and dividends, outperforming the 20% returned by the overall real estate investment trust (REIT) index. In the third quarter of 2021, the four largest self-storage firms reported record occupancy of more than 95%. According to Green Street, self-storage supply growth levels are not expected to reach those seen in 2020 until 2025. Large self-storage firms are beefing up through acquisitions to leverage the booming market.

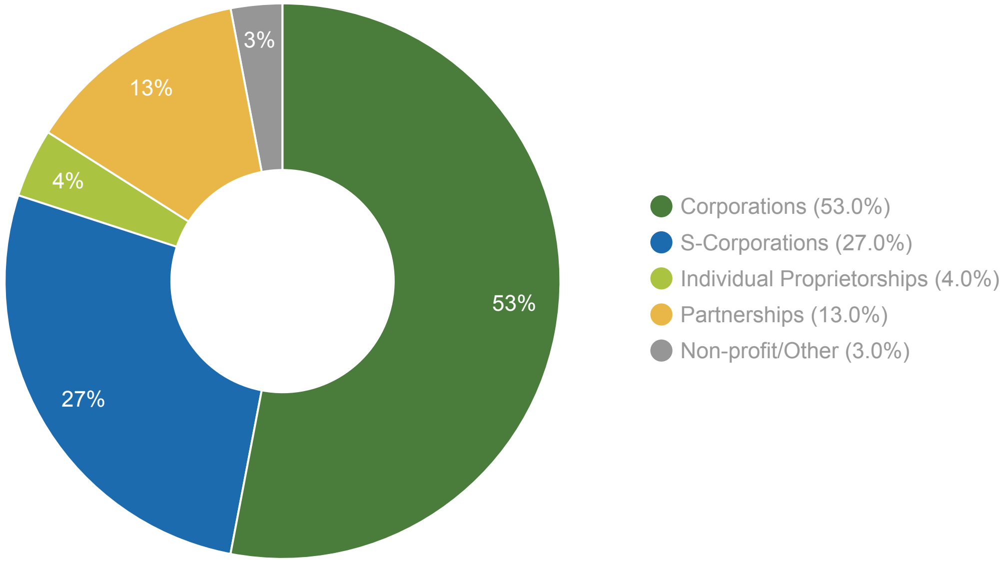
Industry Structure



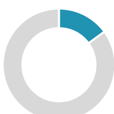
The average warehousing and storage services provider employs about 165 workers and generates $5 million in annual revenue.

- The warehousing and storage services industry consists of about 8,100 firms that employ over 1.3 million workers and generate about $42 billion annually.
- The industry is somewhat fragmented. The top 50 companies account for about 45% of industry revenue.
- Large companies include Excel Holdings (Deutsche Post AG), FedEx Supply Chain (formerly GENCO Distribution Systems), and Iron Mountain Incorporated. The line between warehousing and storage services and logistics is blurred, with companies in both sectors offering similar services.
- Major customer industries include retail and consumer products, high-tech/computers, food and beverage, automotive, and industrial.

Industry Demographics

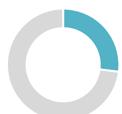


Source: US Census Bureau



Female Owned

15.0%



Minority Owned

27.0%

Veteran Owned

9.3%

Source: Census Bureau

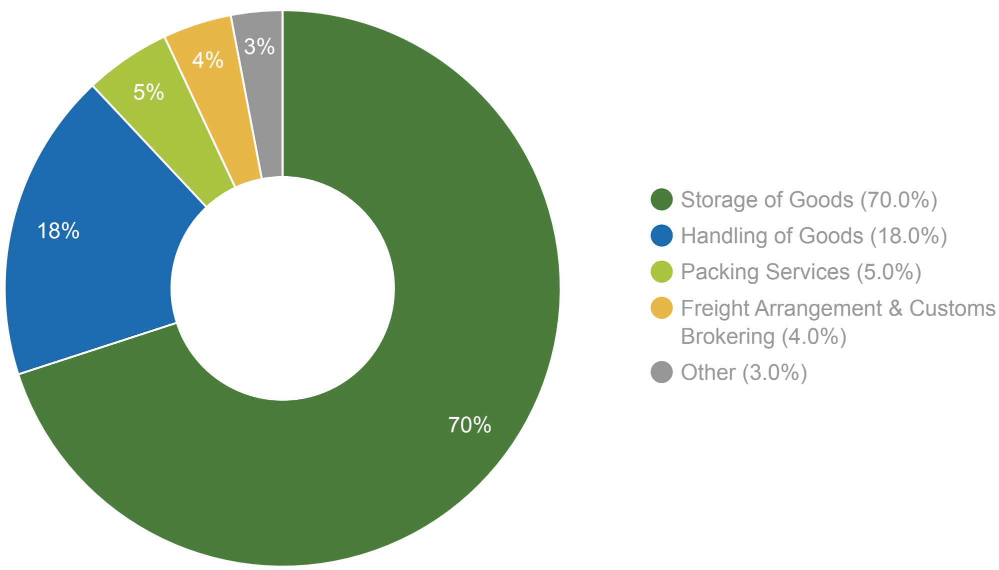
How Firms Operate

Products and Operations

Companies provide warehousing and storage services for general merchandise, refrigerated goods, and other types of products.

- Major revenue categories include storage services, specialty services, handling of goods, logistics, and transportation.
- Specialty services include breaking bulk, returns handling, and light assembly.
- Some firms provide comprehensive logistics services, which help clients manage the flow of materials throughout the supply chain. Logistics encompasses a wide range of services, including transportation, warehousing and storage, and inventory management.
- Warehouse and storage services providers are often classified as 3PL (third party logistics) service providers or may partner with 3PL firms.
- The average size of a warehouse is estimated to be just under 185,000 feet, but ecommerce and 3PL facilities often range 600,000 to 2.5 million square feet in size.

Warehousing & Storage Services Revenue



Source: US Census Bureau

Warehousing and storage service providers are an integral part of most supply chains and act as middlemen in the transport of goods. Companies handle products in various forms throughout their lifecycles, including raw materials, in-process goods, finished goods, and returns. General warehousing and storage service providers primarily handle goods in containers, such as boxes, barrels, or drums. Refrigerated warehouses provide cold storage, and may offer blast freezing, tempering, or modified atmosphere storage services. Farm product warehouses, which include grain elevators, offer bulk storage for agricultural goods. The handling and storage of hazardous materials can be subject to government regulation. Outsourced warehousing services allow clients to place goods close to customer locations without investing in storage facilities.

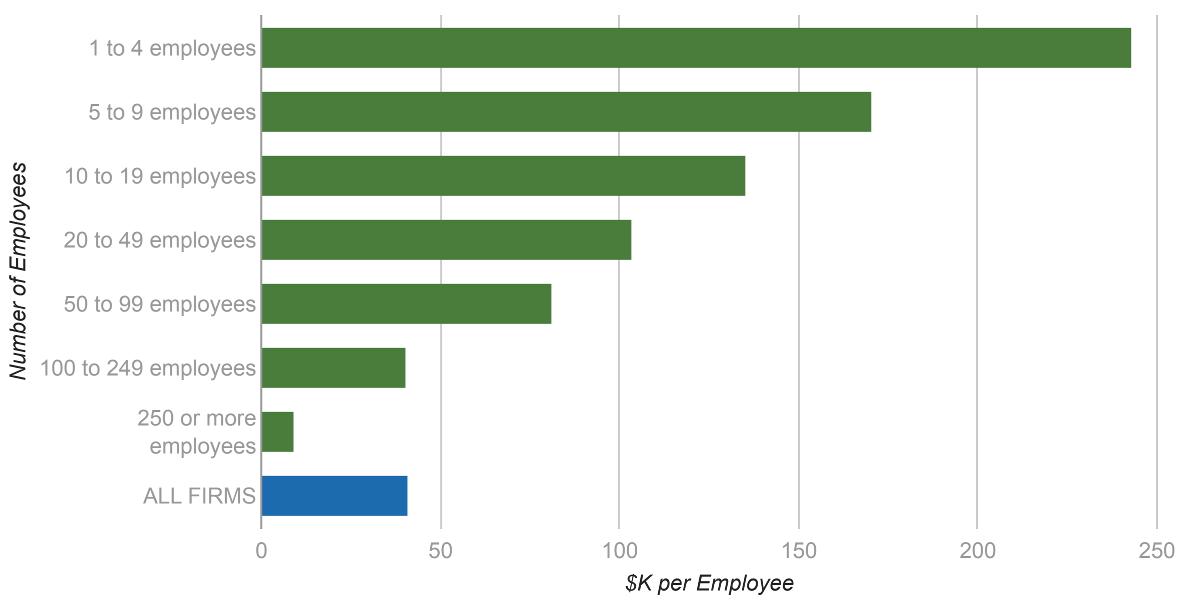
Companies may provide public or contract warehouse services. Public warehouses generally provide short-term storage, often on a month-to-month basis. Contract warehouses provide storage for longer periods (about three to five years), and customers may subsidize the cost of storage facilities and material handling equipment. Public warehouses are often used to provide supplemental storage, while contract warehouses are typically used as primary storage.

Basic warehouse operations include receiving goods, storing goods, picking (selecting) goods, and shipping goods. Goods arrive at loading docks by truck, rail, or boat. Equipment includes forklifts, loaders, trucks, pallets, and storage racks. Large companies operate networks of warehouses to best serve clients and their customers. While the size of an individual warehouse varies, many warehouses are less than 100,000 square feet. Companies select locations based on proximity to customers and modes of transportation. Refrigerated warehouses are often found at seaports.

Automated storage facilities use specialized information systems and conveyer systems to control the movement of goods. Companies use radio frequency identification (RFID) or bar coding systems to identify and track products. Just-In-Time (JIT) inventory management has forced many warehouse operators adapt to variability in client demand and provide rapid response. Cross docking is the direct flow of goods from receiving to shipping, with minimal to no intermediate storage requirements. The warehousing and storage industry has evolved to include value-added services, such as order processing, returns handling, breaking bulk, repackaging, light assembly, labeling, and customer billing.

Companies employ equipment operators to move materials. “Pickers” and “packers” fill and package orders. Some firms employ unionized labor. Because operations can involve lifting and moving heavy items, the incidence of injury is higher for warehouse workers.

Revenue per Employee by Establishment Size



Source: US Census Bureau

Profit Drivers

Achieving High Utilization

Warehousing and storage services strive to achieve high utilization of their fixed storage capacity to maximize revenue. Contract warehouses have more stable demand due to multi-year contracts with customers, while public warehouses face more variable demand for short-term storage. Firms must carefully plan the size and location of capacity additions to meet evolving customer needs.

Expanding Value-Added Services

By offering value-added services in addition to storage, warehousing and storage services can attract new customers and increase their revenue per customer. Value-added services include inventory management and handling, as well as logistics services. Inventory services include cycle counting, quality control, labeling, packaging, and returns handling. Demand for logistics continues to grow, as many customers lack the expertise or resources to effectively internally manage offshore/outsourced manufacturing, low cost sourcing, regulatory compliance, transportation, and other elements of the supply chain effectively.

Improving Operational Efficiency

To remain competitive, companies constantly seek out productivity improvements to achieve lower operating costs. Ongoing pressure to reduce costs has made the implementation of technology critical for warehousing and storage service providers. Automated storage facilities use specialized information systems and conveyer systems to control the movement of goods. Companies use radio frequency identification (RFID) or bar coding systems to identify and track products. Picking technology, including voice-directed picking and pick-to-light (computer guided picking), improves order accuracy. Automated Storage and Retrieval Systems (AS/RS) can greatly reduce labor costs.

Industry Trends

Trends are affected by the COVID-19 pandemic.

Changes in revenue, employment, business practices, trade and forecasts are occurring rapidly and data reporting by the government lags the changes. We are tracking changes in the "Coronavirus Update" chapter.

Industry Expands

The warehousing and storage services industry is experiencing strong growth. Industry revenue increased 4-7% annually in 2016-2019 and 2% in 2020. Economic uncertainty was less of a concern for the industry in recent years as manufacturing output and consumer spending increased. In 2020, the industry was called on to support distribution of critical supplies in the battle against Covid-19. Warehousing and storage firms stand are also benefiting from greater e-commerce spending and government efforts to bring manufacturing back to the US.

Value-Added Warehousing

As customers continue to demand more from the warehousing and storage industry, the popularity of value-added warehousing grows. Efforts to improve efficiency have led to outsourcing requirements beyond storage. Companies that can provide additional services, including cycle counting, quality control, labeling, packaging, and returns handling, are attracting a broader range of customers. Demand for logistics, which encompass transportation, warehousing, and other elements of supply chains, continues to grow, creating opportunities for firms that offer an expanded portfolio of services.

Improved Vacancy Rates

As economic conditions strengthened, vacancy rates have dropped below pre-recession levels. Overall vacancy rates for warehouses and distribution centers in the US fell to a low of about 4.7% in Q1 2019 then began to rise, reaching a high of 5.3% in Q4 2020. The rate fell back to 4.9% in Q1 2021, according to Cushman and Wakefield (C&W). Before the recession, the vacancy rate low was about 8%. During the last recession, vacancy rates reached 11%. Increased trade volume at ports combined with supply constraints due to lack of new construction have driven up rental rates, with some markets experiencing shortages. Newly constructed space exceeded demand by 20% in 2020 and 29% in 2021. C&W expects newly constructed space will exceed demand by 30% in 2021 and could result in higher vacancy rates.

Global Manufacturing Forces Change

The shift from domestic manufacturing to offshore production across multiple industries has forced change in supply chain management and contract warehousing operations. The increased distance involved in offshore production lengthens timelines, creates the need for more safety stock and higher inventory levels, and increases transportation costs. Distribution networks have evolved to favor coastal locations, which provide better access for importers. Increasing land transport costs have led shippers to consider ocean routes through the Suez and Panama canals for better access to the east coast and gulf ports. To avoid port congestion and address land shortages near seaports, some firms have located warehouses up to 100 miles from the ocean.

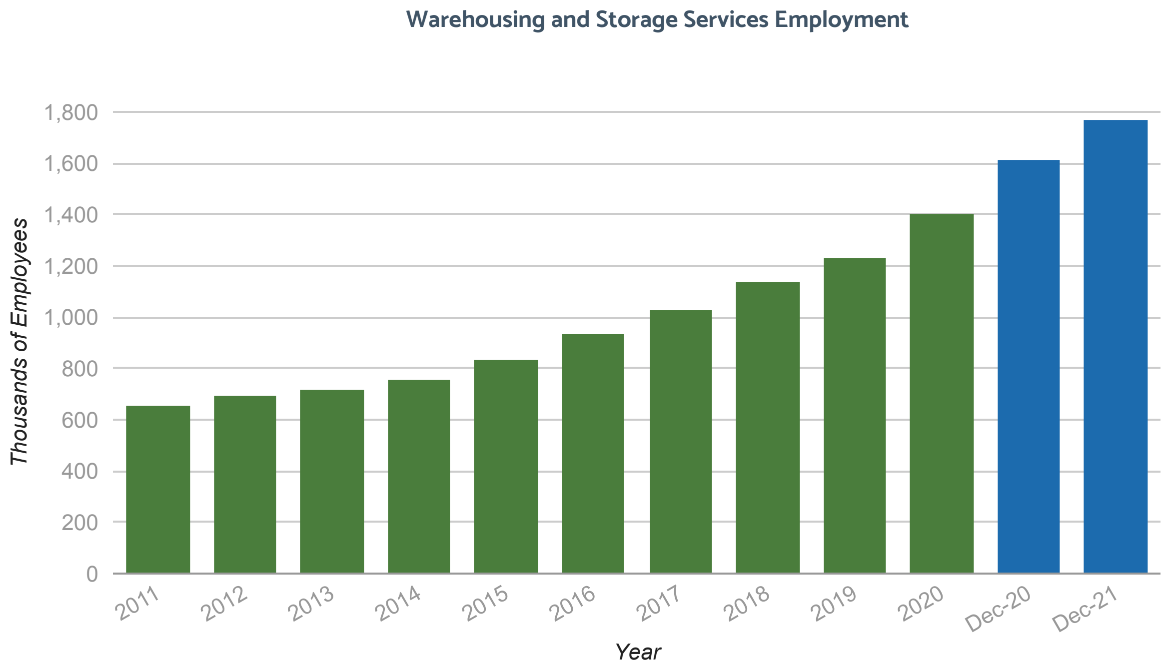
Demand For Logistics Service Growing

The growing complexity of supply chains has generated increased demand for third-party logistics (3PL) services. Many customers lack the expertise or resources to effectively internally manage offshore/outsourced manufacturing, low cost sourcing, regulatory compliance, transportation, and other elements of the supply chain effectively. 3PL providers, which include Value-Added Warehouses and Distribution (VAWD), provide infrastructure to support supply chain management. According to Armstrong and Associates, revenue for VAWD increased 2-4% annually in 2014-2017, then 8% in 2018 and 9% in 2019. The Covid-19 pandemic hurt demand for VAWD services, resulting in an 18% decline in revenue in 2020. VAWD revenue is expected to increase 4.1% in 2021.

Employment and Wage Trends

Employment by warehousing and storage services increases

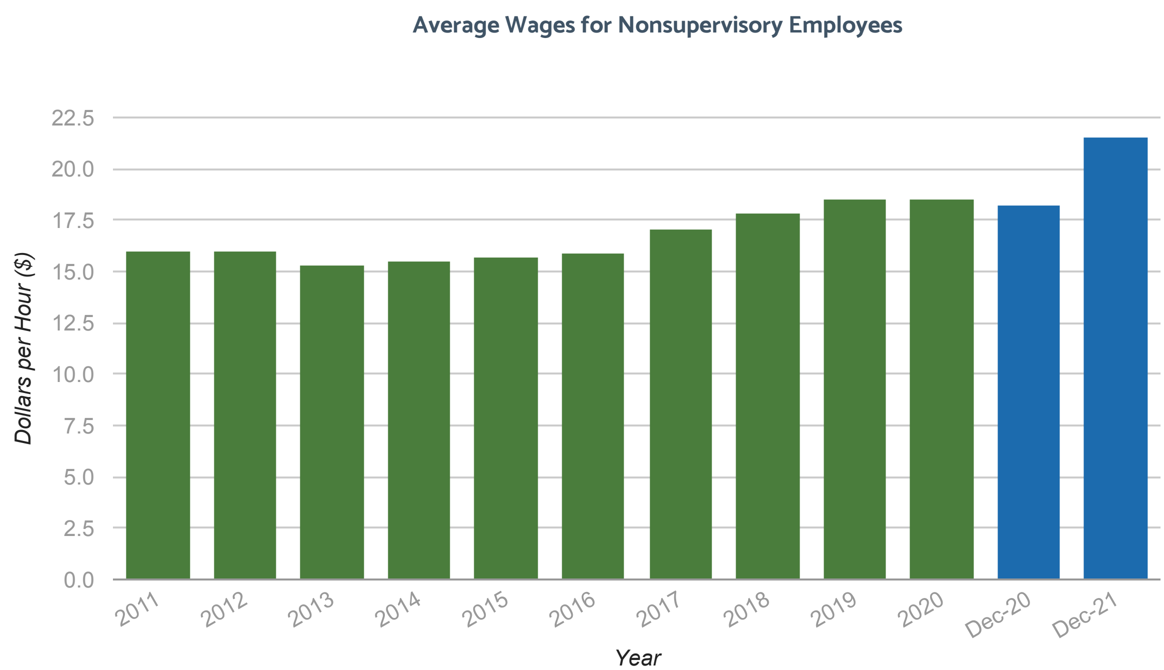
Overall employment by warehousing and storage services changed 9.7% in December compared to a year ago, according to the latest data from the Bureau of Labor Statistics.



Source: Bureau of Labor Statistics

Wages at warehousing and storage services rise

Average wages for nonsupervisory employees at warehousing and storage services were $21.49 per hour in December, a 17.7% change compared to a year ago.



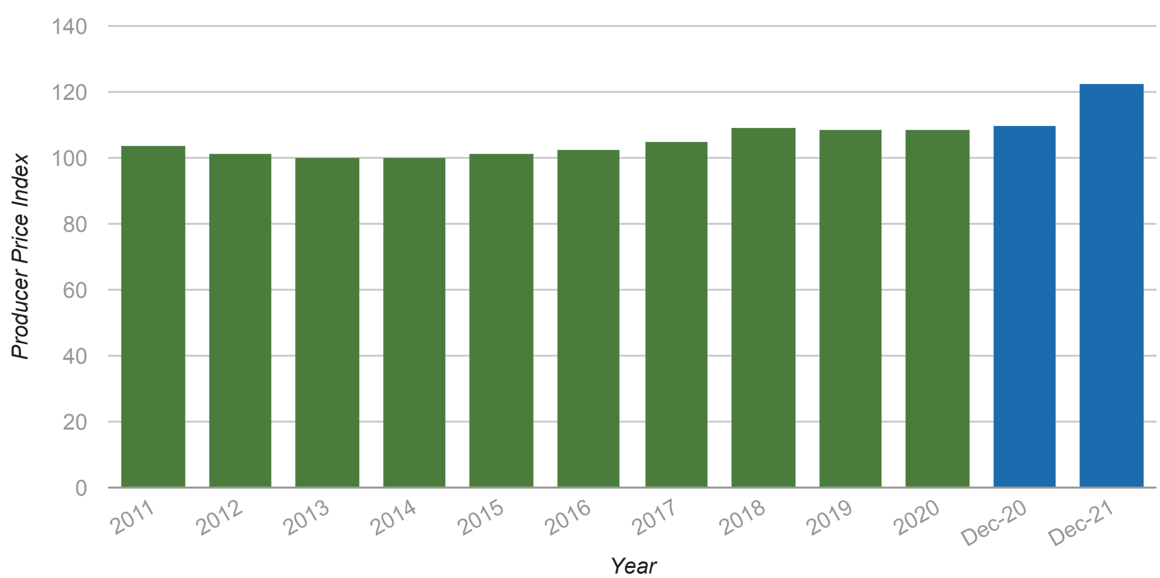
Source: Bureau of Labor Statistics

Price Trends

Producer Prices for warehousing and storage services rise

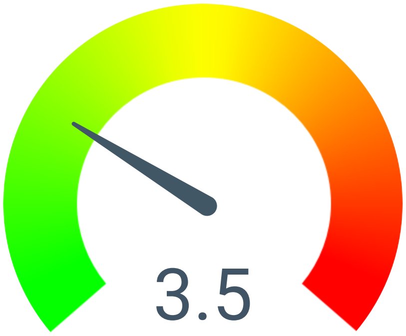
The Producer Price Index for warehousing and storage services changed 11.14% in December compared to a year ago, according to the latest data from the Bureau of Labor Statistics.

Producer Price Index for warehousing and storage services



Source: Bureau of Labor Statistics

Credit Underwriting and Risks



Industry Risk Rating:
Sound

Business Exit Rates:	3.0	Lower than US average for all businesses
Cyclical Sensitivity:	4.5	Low Sensitivity
Barriers to Entry:	3.6	Very high initial capital; high regulatory/technical barriers; moderate concentration
External Risk:	3.9	Low external risk
Industry Outlook:	1.8	Much higher than GDP; some cyclical risk
Financial Summary:	4.6	Average margins; moderate liquidity; low leverage

Key Metrics

METRIC	VALUE	COMPARISON
Performance During 2007–2009 Recession	3.8%	0.0% GDP
Business Exit Rate 2019–2020	6.77%	9.0% All Industries
Compound Annual Growth Forecast (2020–2025)	7.21%	6.1% GDP
SBA 7(a) Default Rate by Number of Loans (2010-2019)	3.02%	3.82% All Industries
SBA 7(a) Default Rate by Gross Loan Amount (2010-2019)	0.43%	1.21% All Industries

Underwriting Considerations

- The warehouse and storage industry has had a long growth period. Geographic market conditions are important as many companies have been entering this sector.
- Typical financing need is for owner occupied commercial real estate. Does the company have this financing need?
- Does the company expect to expand in the near future?
- How do the company's OPM, leverage and liquidity compare to industry average?

Industry Risks

Sensitivity To Economic Conditions

Although the warehousing and storage services industry is recession-resistant, demand is sensitive to economic conditions. An individual company's exposure to risk is dependent on the performance of customer industries. Customers often reduce production and inventory levels during tough economic times and leave third-party storage providers with excess capacity. Increased price sensitivity affects customer loyalty. During the last recession, industry revenue experienced a brief decline.

Competition From Alternative Sources

Warehousing and storage services providers face competition from a variety of alternative sources, including logistics firms, transportation providers, customer in-house storage capabilities, and direct shipment programs. Logistics firms provide comprehensive supply chain management services that incorporate storage. Transportation providers, such as trucking companies, have expanded into warehousing. Customers looking for more control may bring storage in-house. Programs that ship goods directly from manufacturers to customers can eliminate the need for temporary storage and third-party warehousing.

Liability For Customers' Goods

Warehouses are responsible for the goods they store, and companies are exposed to financial risk for loss, destruction, or damage that may occur. Fires, floods, or theft create significant losses and liabilities. Movement of materials creates additional risk for damage. Storage of sensitive materials, such as government, financial, or health care-related information, requires additional security measures. Refrigerated storage providers face risks associated with warehousing perishable products. Companies typically carry insurance to protect against significant losses.

Move To Minimize Inventory Levels

Many customer industries have made significant investments in technology and infrastructure to free up working capital by minimizing inventory holdings, reducing the need for third party storage. Cross docking programs facilitate direct shipment of goods and eliminate temporary storage requirements. Just-in-Time (JIT) production systems reduce in-process inventory and the need for warehouse space. In some cases, inventory turns remain steady, but space requirements decrease. Efforts to improve supply chain efficiencies and reduce inventory levels can result in elimination of unnecessary warehousing services.

Seasonality Affects Demand

Demand for certain types of goods stored in warehouses and distribution centers can be highly seasonal. Sales of many types of retail items peak during the winter holidays, when gift giving is prevalent. Toys are produced year-round, but generally sold during a short period of time. Space requirements for agricultural warehouses vary depending on growing seasons. During peak periods, companies may scramble to hire additional workers to facilitate increases in inventory movement.

Company Risks

Competing With Large Companies

Consolidation has created a greater number of large companies, many of which offer comprehensive supply chain management services and have better access to capital. Large companies are better able to serve clients with multiple locations and invest in cost saving technology. With limited reach and access to capital, small firms may struggle to match the level and breadth of service or offer the prices large companies can provide.

Pressure To Improve Productivity

In order to maintain competitive pricing, companies constantly seek out productivity improvements to achieve lower operating costs. While investment in automation and technology is one of the best ways to achieve productivity gains, companies are often fearful to commit due to high upfront costs. In addition, firms may be reluctant to commit to technology to maintain flexibility. SKU proliferation, shorter product life cycles, and seasonality associated with certain customers create dynamics that favor flexible systems.

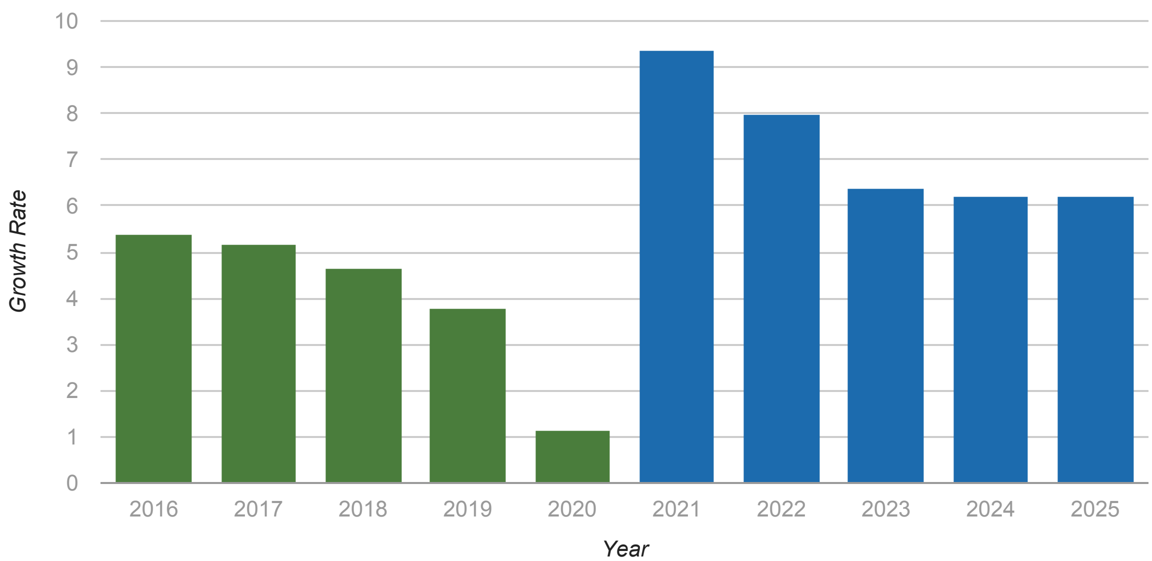
Industry Forecast

Sales for the US warehousing and storage services industry are forecast to grow at a 7.21% compounded annual rate from 2020 to 2025, greater than the growth of the overall economy.

Vertical IQ forecasts are based on the Inforum inter-industry economic model of the US economy. Inforum forecasts were prepared by the Interindustry Economic Research Fund, Inc.

Last Update: August 2021

Warehousing and Storage Services Industry Growth



Source: Interindustry Economic Research Fund, Inc.

Working Capital

Sell and invoice

Companies generate revenue by charging fees for warehousing and related services. Contract warehouses generally require a legal agreement for services over a fixed period (typically three years). Contract terms vary. Fees can be fixed or based on cost-plus, the number of transactions, or the amount of storage space. With open book contracts, firms share cost information with customers and earn fees based on a percentage of costs. With closed book contracts, firms charge a fixed rate for services. The average value of most yearly contracts ranges from $1 million to $5 million, according to Armstrong and Associates. Public warehouses provide short term storage and generally base fees on a combination of storage fees (per pallet/case or square footage) and transaction fees (inbound or outbound).

> 47% of trucking and warehousing companies said they go to their accountant or bookkeeper for cash flow advice, while 37% turn to their banker and 50% do not seek advice, according to a survey of small businesses by Barlow Research Associates.
>
> *Source: Barlow Research Associates.*

Collect

Most companies offer customer credit and bill monthly. Firms may also offer prepaid contracts. In some cases, customers will ”short pay” service providers for inventory shortages, damages, or errors in shipments. Contracts often contain liens, which allow firms to hold goods and stop shipment if a customer fails to pay. Collection periods average 43 to 45 days and receivables average 20-21% of assets.

Manage Cash

The types of verticals served by an individual company affect operating margins. For example, margins for firms that serve chemical, telecommunications, apparel, and high tech verticals can generate higher margins than firms that serve food and beverage or hardgoods customers. Contract warehouses generally provide more specialized, labor-intensive services. Value-added services, such as returns handling or repackaging, generate incremental revenue.

Multi-year contracts help ensure steady cash flow for contract warehouses, while revenue for public warehouses is more variable. Contract warehouses may be dedicated to a single or limited number of customers - early contract termination creates sudden and dramatic reductions in cash flow. Because public warehouses often service customers with seasonal needs, cash flow can be uneven.

Pay

Payroll averages 30-32% of sales. The biggest component of labor costs comes from materials handling, including receiving, stocking, picking, packing, and loading operations. Automation technology can help lower labor costs. Companies also incur costs to fuel and maintain equipment, such as forklifts and truck loaders. Rent averages 13-17% of sales, and varies according to location. Warehouses located in high traffic areas or in close proximity to ports typically pay higher rents.

Report

After-tax net profit averages 9-11% of sales. Key measurements include on-time shipment, fill rate (orders filled completely and on time), accuracy (percentage of items picked correctly), damage (percentage of orders picked with undamaged goods), and cycle time (time from order receipt to shipment, dock to stock time - time from receipt to availability). Companies measure productivity by tracking units/lines picked per hour and total handling cost per unit. Storage cost per unit and capacity measurements are used to evaluate space utilization.

Cash Management Challenges

Cash Shortfalls Due To Weak Demand

With high costs for facilities and staffing, warehousing and storage services may experience cash shortfalls during periods of reduced demand due to seasonal factors or economic conditions. Public warehouses are more vulnerable to swings in demand than contract warehouses, particularly if they serve seasonal customers, such as retailers or agricultural companies.

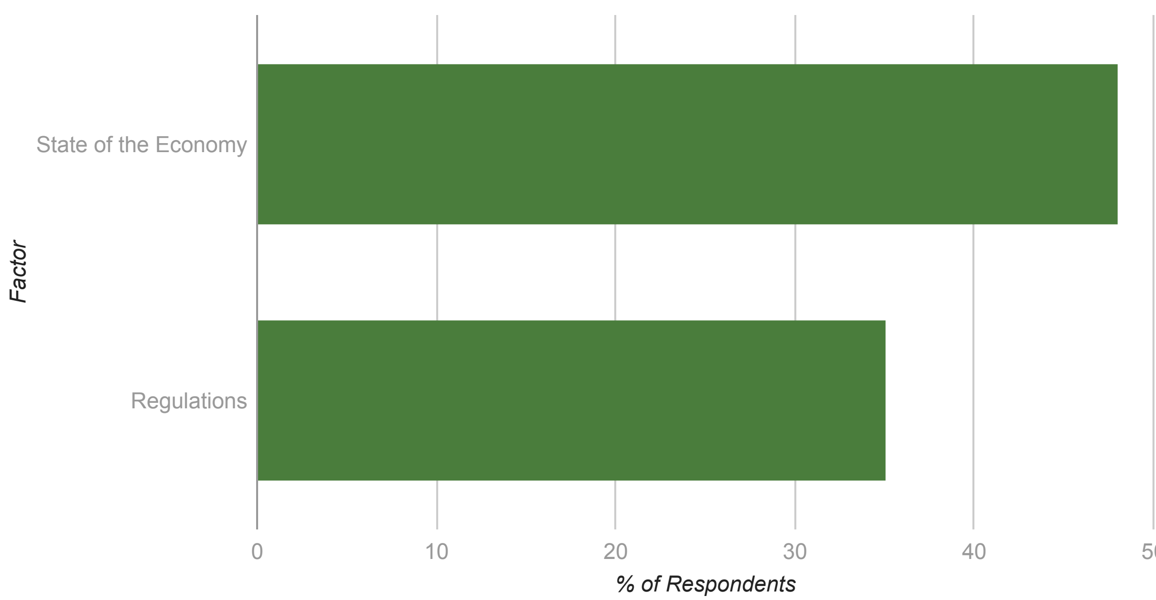
Funding Expansion Of Value-Added Services

Customer efforts to reduce inventory levels through improved logistics and just-in-time manufacturing can reduce demand for warehousing and service providers, but also creates opportunities for value-added services. Customers are outsourcing more inventory management and logistics functions and companies often need to invest in these capabilities to compete for business. Firms may face short-term challenges in funding the additional staffing, training, and information system improvements required to offer these value-added services.

Efficiently Collecting Customer Payments

Warehousing and storage services typically bill monthly and customers can be slow to pay. Customers may “short pay” for damages or errors in shipments. Implementing electronic billing and payment can help speed up the availability of funds and reduce labor costs, particularly for recurring invoices issued by contract warehouses.

Factors Causing Cash Flow Stress: Trucking and Warehousing



Source: Barlow Research Associates

Capital Financing

Projects that involve capital financing include the purchase of property, buildings, equipment, vehicles, and information systems. Location is critical to securing customers and generating revenue. The availability and pricing of property varies depending on numerous factors, such proximity to ports, major transportation hubs, and customer locations. In many logistics hub markets, supply of acceptable space is limited. Companies may lease or purchase property for warehouses.

Due to the significant investment required to build, equip, and staff a warehouse, contract warehouses require multi-year arrangements from customers. Contract warehouses are often specialized and tailored to a particular customer's needs. Temperature-controlled storage facilities require additional investment for cooling equipment. In some cases, customers share costs for storage and material handling equipment. Equipment includes forklifts, loaders, lift trucks, pallets, and storage racks.

Warehousing and storage service providers are highly dependent on information systems and technology to help manage day-to-day operations. Computerized Warehouse Management Systems (WMS) allow companies to process orders, manage inventory, schedule shipping, and store and analyze data electronically. Conveyer systems, hand-held devices, and bar code and radio frequency identification (RFID) systems automate standard warehouse operations and increase productivity. Picking technology, including voice-directed picking and pick-to-light (computer guided picking), improves order accuracy. Automated Storage and Retrieval Systems (AS/RS) can greatly reduce labor costs. Carousel systems improve storage density and pick speed. Ongoing pressure to reduce costs has made the implementation of technology critical for warehousing and storage service providers.

Companies also require capital to grow, through expanding existing facilities, adding new facilities, or acquiring other companies. Warehousing and storage service providers add capacity through expansions and additions. Companies may reconfigure existing facilities to accommodate new technology. Acquisitions are common in the industry, with firms expanding into new geographical markets or optimizing distribution networks by purchasing other companies.

Large companies may rely on stock, debt, cash, or a combination to fund capital projects. Small companies rely on commercial banks or equipment financing companies. Contract warehouse operators may require customers to purchase or subsidize certain capital costs.

Examples of Equipment Purchases

Forklift Truck

$20,000 - 30,000

Truck used for moving pallets or boxes in a warehouse. Price varies by load capacity and engine type. Electric forklifts generally cost more than diesel or gasoline-powered forklifts.

Information Systems

$50,000 - 500,000

Enterprise resource planning (ERP) is used to manage inventories and logistics. Electronic data interchange (EDI) is used to share inventory information with suppliers and customers. Initial costs vary depending on organization size and level of support.

RFID Equipment

$200 - 4,000

Radio Frequency Identification (RFID) systems consists of tracking tags placed on merchandise, readers to scan the tags, antennas, and mapping software.

Cranes and Hoists

$100 - 6,000

Used to move heavy machinery or pallets. Cranes and hoists may be portable or mounted to a structure.

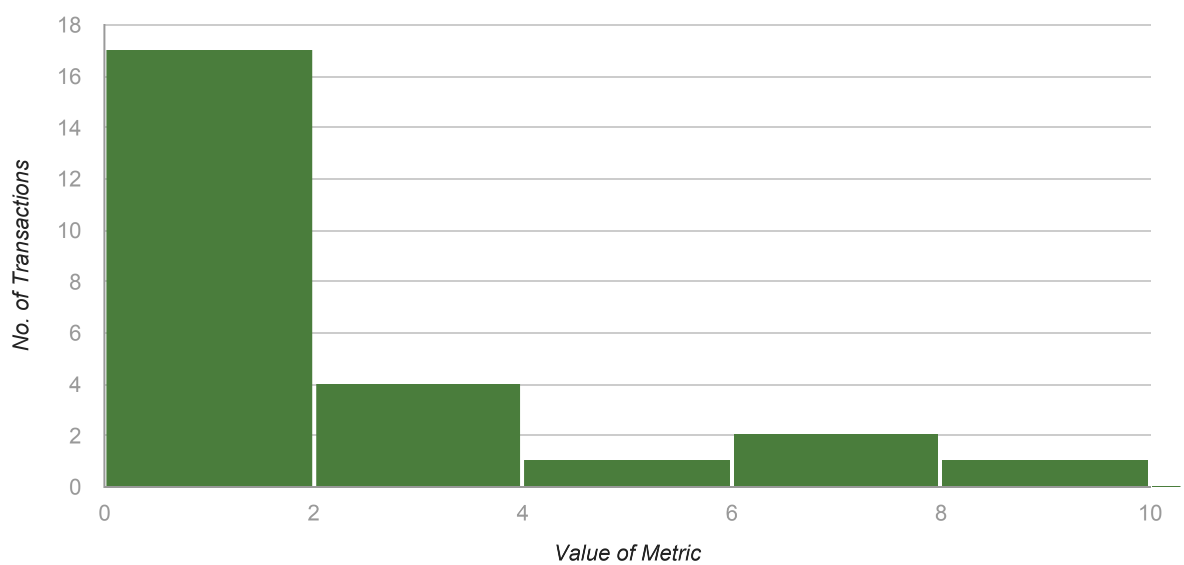
Business Valuation

This data on business valuations is supplied by DealStats, an online database with the most complete financial details on nearly 36,000 acquired companies. These companies are mostly small and medium-sized private firms.

Summary Valuation Data for Warehousing and Storage Services

	MEDIAN	MEAN	# TRANSACTIONS	DATES
Price to Net Sales	1.09	2.2	25	11/25/1997–11/17/2020
Price to Gross Profits	1.28	3.18	17	11/25/1997–11/17/2020
Price to EBITDA	8.32	11.96	13	11/25/1997–11/17/2020
Price to EBIT	13.09	14.77	19	11/25/1997 –11/17/2020

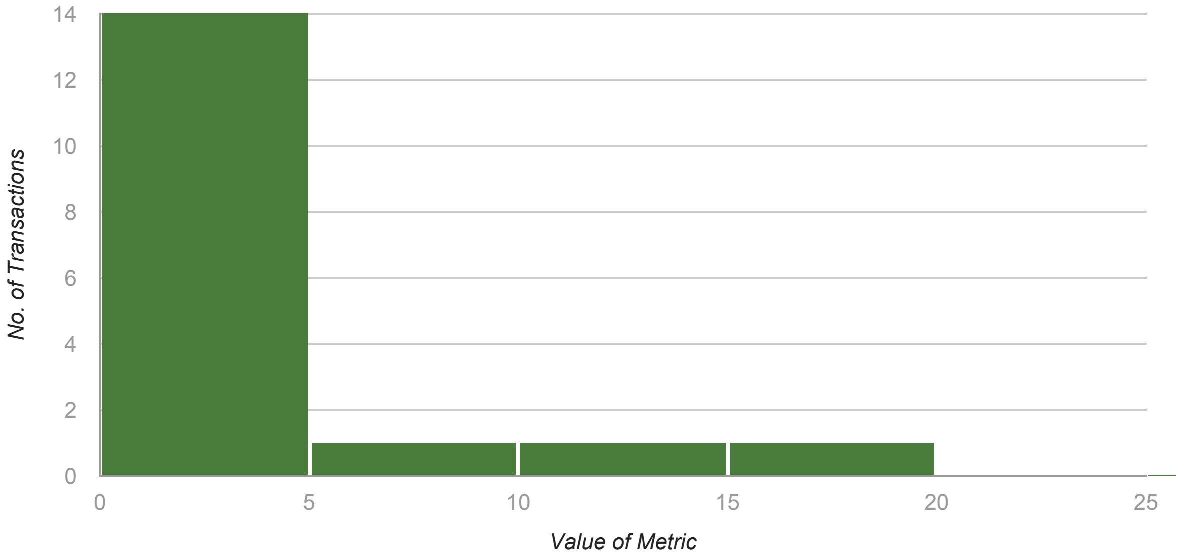
Click on the metric below to see a distribution of transactions for the industry:



Source: DealStats

Count: 25 **Min:** 0.12 **Max:** 8.65 **Mean:** 2.2 **Median:** 1.09

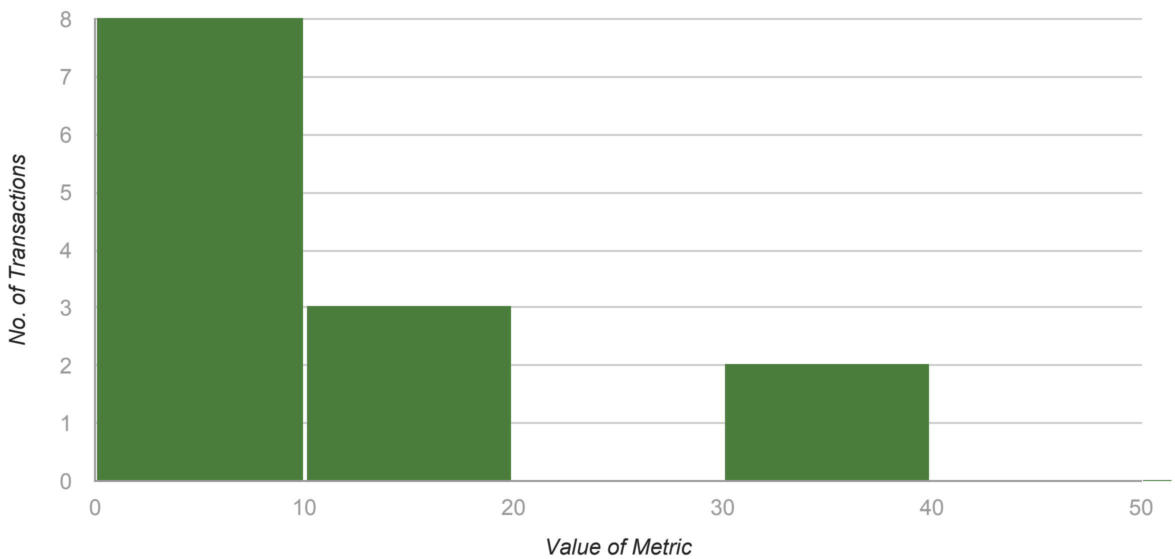
Price to Sales = Selling Price/Net Sales
Date range: 11/25/1997 - 11/17/2020



Source: DealStats

Count: 17 **Min:** 0.12 **Max:** 17.77 **Mean:** 3.18 **Median:** 1.28

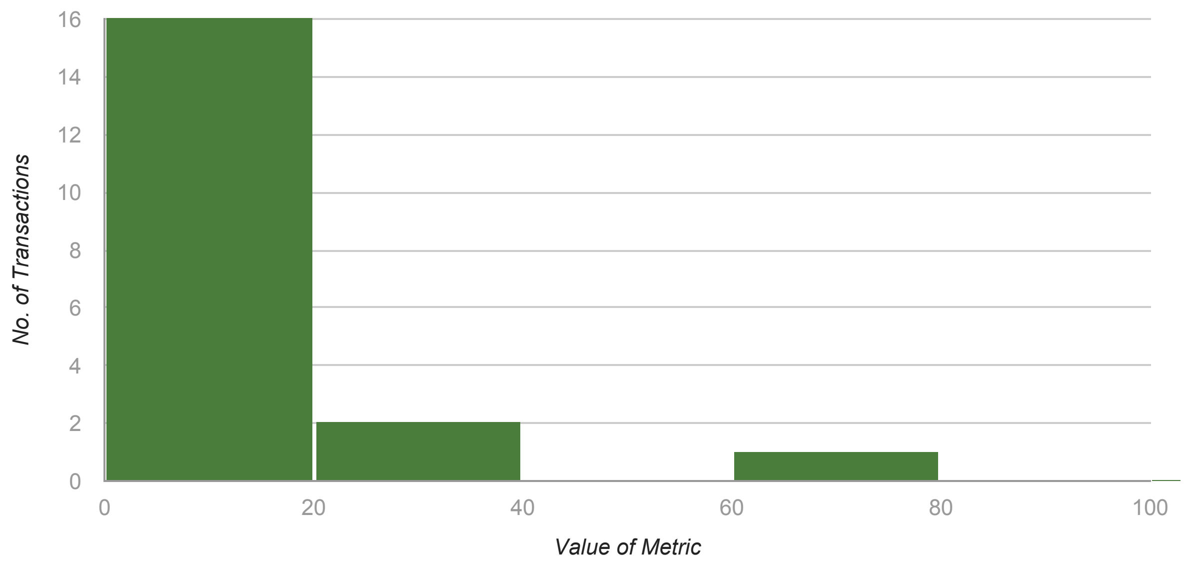
Price to Gross Profit = Selling Price/Gross Profit
Date range: 11/25/1997 - 11/17/2020



Source: DealStats

Count: 13 **Min:** 2.3 **Max:** 38.22 **Mean:** 11.96 **Median:** 8.32

Price to EBITDA = Selling Price/Operating Profit + Depreciation & Amortization
Date range: 11/25/1997 - 11/17/2020



Source: DealStats

Count: 19 **Min:** 1.01 **Max:** 67.94 **Mean:** 14.77 **Median:** 13.09

Price to EBIT = Selling Price/Operating Profit
Date range: 11/25/1997 - 11/17/2020

Selling Price, also known as MVIC (Market Value of Invested Capital) *is the total consideration paid to the seller and includes any cash, notes and/or securities that were used as a form of payment plus any interest-bearing liabilities assumed by the buyer. The MVIC price includes the noncompete value and the assumption of interest-bearing liabilities and excludes (1) the real estate value and (2) any earnouts (because they have not yet been earned, and they may not be earned) and (3) the employment/consulting agreement values. In an Asset Sale, the assumption is that all or substantially all operating assets are transferred in the sale. In an Asset Sale, the MVIC may or may not include all current assets, non-current assets and current liabilities (liabilities are typically not transferred in an asset sale).*

Source: DealStats 2019 (Portland, OR; Business Valuation Resources LLC). Used with permission. DealStats is available at https://www.bvresources.com/learn/dealstats

Financial Benchmarks

The following financial benchmark data is based on annual financial statements submitted by member institutions of the Risk Management Association from Q2 of the first year listed through Q1 of the following year.

Financial Ratios (Warehousing and Storage Services, Industry-wide)

MEASURE	2018-19	2019-20	2020-21
Current Ratio	1.63	1.39	1.60
Quick Ratio	1.25	1.04	.95
Days Inventory	12.97	15.15	30.02
Days Receivables	43	45	41
Days Payables	21.6	22.63	22.82
Pre-tax Return on Revenue	5.35%	5.46%	3.67%
Pre-tax Return on Assets	7.91%	7.21%	4.76%
Pre-tax Return on Net Worth	18.59%	18.36%	13.57%
Interest Coverage	7.90	6.95	5.81
Current Liabilities to Net Worth	.51	.60	.71
Long Term Liabilities to Net Worth	0.84	0.94	1.14
Total Liabilities to Net Worth	1.35	1.55	1.85
Number of Firms Analyzed	*500*	*424*	*226*

Income Statement (Warehousing and Storage Services, Industry-wide)

ITEM	2018-19	2019-20	2020-21
Revenue	100.0%	100.0%	100.0%
Cost of Sales	58.13%	56.15%	55.0%
Gross Margin	41.87%	43.85%	45.0%
Officers Compensation	1.32%	1.29%	1.28%
Salaries-Wages	8.42%	9.4%	9.63%
Rent	3.99%	4.86%	2.18%
Taxes Paid	1.28%	1.47%	1.39%
Advertising	0.1%	0.12%	0.24%
Benefits-Pensions	1.08%	1.28%	1.83%
Number of Firms Analyzed	*500*	*424*	*226*

ITEM	2018-19	2019-20	2020-21
Repairs	0.88%	1.01%	1.69%
Bad Debt	0.06%	0.07%	0.06%
Other SG&A Expenses	1.68%	2.46%	4.84%
EBITDA	23.06%	21.89%	21.86%
Amortization-Depreciation	7.32%	7.23%	8.12%
Operating Expenses	26.13%	29.19%	31.26%
Operating Income	15.74%	14.66%	13.74%
Interest Expense	5.11%	4.67%	5.01%
Other Income	-0.33%	-0.25%	-1.63%
Pre-tax Net Profit	10.96%	10.24%	10.36%
Income Tax	0.42%	0.17%	0.3%
After Tax Net Profit	10.54%	10.07%	10.06%
Number of Firms Analyzed	*500*	*424*	*226*

Balance Sheet (Warehousing and Storage Services, Industry-wide)

ASSETS	2018-19	2019-20	2020-21
Cash	12.86%	11.92%	15.79%
Receivables	21.2%	19.62%	19.85%
Inventory	4.43%	4.76%	6.12%
Other Current Assets	3.51%	3.21%	4.53%
Total Current Assets	42.0%	39.52%	46.29%
Net Fixed Assets	44.76%	44.83%	39.7%
Net Intangible Assets	4.85%	5.35%	5.51%
Other Non-Current Assets	8.39%	10.32%	8.5%
Total Assets	*100.0%*	*100.0%*	*100.0%*

LIABILITIES			
Accounts Payable	9.83%	8.65%	9.13%
Loans/Notes Payable	9.93%	10.82%	8.45%
Other Current Liabilities	7.9%	9.46%	10.44%
Number of Firms Analyzed	*500*	*424*	*226*

LIABILITIES

Total Current Liabilities	27.66%	28.92%	28.02%
Total Long Term Liabilities	35.54%	38.18%	33.78%
Total Liabilities	63.2%	67.1%	61.8%
Net Worth	36.8%	32.9%	38.2%
Total Liabilities & Net Worth	100.0%	100.0%	100.0%
Number of Firms Analyzed	*500*	*424*	*226*

Vertical IQ financial benchmark data is based on data provided by the Risk Management Association (RMA) and Powerlytics, Inc. RMA's Annual Statement Studies provide comparative industry financial benchmarks based on financial statements of small and medium business clients of RMA's member institutions. Additional detail on income statement line items is provided using Powerlytics financial benchmarks, which are based on reporting submitted to the IRS. Additional detail on these data sources can be found at RMA and Powerlytics.

Bank Product Usage

Top Bank Products Used by Warehousing and Storage Services

The following table provides the frequency of bank product usage by Warehousing and Storage Services with less than $10 million in annual revenue. It is provided by Barlow Research Associates, Inc., the premier market research firm in the financial services industry.

BANK PRODUCT	% OF FIRMS
Business checking account services	95.0
Automated clearing house services (ACH)	75.0
Commercial real estate mortgage	71.0
Commercial real estate mortgage (investment property)	63.0
Commercial real estate mortgage (company occupied building)	58.0
Point-of-sale credit card processing	58.0
Business savings or money market account	52.0
Wire transfer services	43.0
Business credit card issued in your company's name (Visa, MasterCard, Amex, etc.)	39.0
Remote deposit capture (scanning checks at your office or by mobile device for electronic deposit)	37.0
Business debit card or business check card	36.0
Credit lines secured by receivables, inventory, property or other assets	34.0
Payroll processing	29.0
Electronic payments initiated through the Internet (Bill Payment)	24.0
Term loans or equipment financing (one year +)	21.0
Unsecured short-term loans or working capital line of credit (less than one year)	21.0
Overdraft protection for business checking	18.0
SBA loans	14.0
Company sponsored 401(k), SEP, pension or profit sharing plan	9.0
Money market mutual funds or short-term investments	8.0
Certificates of deposit	8.0
Equipment leasing	5.0
Account reconciliation processing (ARP)	3.0
Overnight investment or sweep accounts	2.0
Accounts receivable collection (lockbox)	1.0
International (foreign exchange, import/export letters of credit)	1.0

Barlow's Small Business Banking program is a multi-client research program sponsored by leading banks. Each quarter, a stratified random sample of businesses throughout the United States with sales between $100,000 to $10 million compiled from an independent list provider are invited to participate in a comprehensive banking survey of over 100 questions. The results measure channel adoption, bank satisfaction, brand power, account management, service quality, business product usage and the selling abilities of leading providers. The results in this chapter are calculated directly from the business product usage section and represent usage for the average small business ($100K-<$10MM).

For more information on Barlow's banking research, go to http://www.barlowresearch.com/

Quarterly Insight

4th Quarter 2021

E-commerce Drives Strong Warehousing Demand Amid Tight Supply

As consumers increasingly expect same-day or even two-hour e-commerce deliveries, retailers are scrambling to secure last-mile warehouses near urban centers, according to The Wall Street Journal. However, warehouse utilization has tightened during the pandemic, which has reduced vacancies and pushed up rents. US industrial rent rates in the third quarter rose more than 7% as vacancies hit a new low of about 4%, according to real estate firm JLL. Securing locations for last-mile fulfillment centers can be challenging. Industrial property developers seeking to build near urban areas often face competition from other land uses, including multifamily housing and hotels. While consumers want fast e-commerce deliveries, they sometimes balk at the idea of sprawling logistics hubs in their neighborhoods. As a solution, some developers are building multi-story, last-mile industrial facilities that feature a smaller footprint and fit better in urban settings.

3rd Quarter 2021

US Port Congestion Drives Up Warehousing Costs

The surge in e-commerce during the pandemic has contributed to logjams at US ports, the most serious being in Los Angeles and Long Beach. Port congestion has spilled into inland industrial distribution hubs as import containers stack up faster than logistics providers can ship goods via truck and rail. As retailers scramble to stock up ahead of the holiday shopping season, warehouse space near US ports has become tighter and more expensive, according to The Wall Street Journal. Warehouse owners near the ports of LA and Long Beach who once required lease terms of three to five years are requiring leases for up to 10 years, according to DHL Supply Chain.

2nd Quarter 2021

Online Grocery Sales to Drive Refrigerated Warehouse Demand

The popularity of online grocery shopping has accelerated during the coronavirus pandemic, and the category is expected to boost demand for climate-controlled warehousing space, according to Commercial Property Executive. The majority of current online grocery fulfillment takes place in grocery retail locations, which is likely a temporary solution to meet the sudden spike in demand due to the pandemic. As the online grocery segment grows, more fulfillment is expected to move to warehousing locations that are more efficient and cost-effective. The cold storage real estate sector saw sales rise 22% in 2020 compared to the prior year, as the wider industrial real estate market fell 11% and the overall commercial segment declined 29%, according to Real Capital Analytics. Because cold storage facilities are three times as costly to build, such projects, historically, are rarely built on spec. However, the need for last-mile cold-storage fulfillment in large urban centers is attracting speculative warehouse investment, according to The New York Times.

1st Quarter 2021

Warehousing Boom to Continue In 2021

The pandemic fueled a huge spike in warehouse demand as consumers shifted to ecommerce. Total leasing of industrial space in 2020 was up nearly 12% compared to 2019, according to commercial real estate firm CBRE's US Industrial and Logistics report released in March. As ecommerce has boosted warehouse demand, prices for space have driven upward. Warehousing asking rents jumped to a record $8.24 per square foot in the fourth quarter, up more than 8% compared to the same period in 2019. Warehouse space near seaports, intermodal rail hubs, and airports are seeing strong demand growth. Amazon and large retailers are snapping up most of the available warehouse space which is putting a squeeze on smaller retailers looking for space. Many of the smaller players are leaning on third-party logistics (3PL) providers to help them meet their warehousing needs. Industry watchers expect continued ecommerce growth – and demand for warehousing – to remain strong throughout 2021.

4th Quarter 2020

Plans to Expand Supply Chain Operations in China

The pandemic exposed the vulnerability of far-flung, complicated global supply chains. Diversification of supply chains is expected to lead companies to move some activities out of China, possibly creating demand for additional warehousing capacity in the US. However, a recent survey by China-based banking firm HSBC suggests some companies are planning to maintain or even expand their presence in China. The HSBC Navigator report surveyed 1,100 companies with revenue of at least $5 million in 11 countries. About 75% of companies said they plan to increase their China-based supply chains over the next two years, and about 40% plan to increase the proportion of their operations in China by 10% or more. The vast size of China's domestic market and its manufacturing capabilities are key benefits that outweigh many of the drawbacks. China's quick economic recovery from the pandemic is also a factor in some companies choosing to expand their supply chains there.

3rd Quarter 2020

Online Grocery Sales to Drive Cold Storage Demand

The popularity of online grocery shopping has accelerated during the coronavirus pandemic, and the category is expected to boost demand for climate-controlled warehousing space, according to Commercial Property Executive. Online grocery currently accounts for about 3% of total grocery sales, but industry watchers project that figure will rise to 7% or 8% in the near term. The majority of current online grocery fulfillment takes place in grocery retail locations, which is likely a temporary solution to meet the sudden spike in demand due to the pandemic. As the online grocery segment grows, more fulfillment is expected to move to warehousing locations that are more efficient and cost-effective.

2nd Quarter 2020

Distancing Spurs Automation Investment

As the pandemic escalated, consumer spending shifted sharply toward ecommerce for grocery and cleaning essentials, as well as diversions like games and electronics. Warehouses were slammed with orders and struggled to hire new workers to meet the surge in demand. COVID-19 outbreaks began to emerge in warehouses and fulfillment centers. After outbreaks at several of its warehouse facilities, Amazon reconfigured its safety protocols. The company said it will spend $4 billion between April and June to improve social distancing, conduct temperature checks, provide masks, and enhance its cleaning procedures. Companies including Amazon, Walmart, and Gap have expedited investments in robotic part pickers and other automation technology to widen the spaces between workers.

1st Quarter 2020

Adoption of Automation Technology Continues

Adoption of automation technology remains strong in the warehousing and storage industry. About 32% of companies that responded to the Modern Material Handling's (MMH) Annual Warehouse and Distribution Center (DC) Equipment Survey in 2019 said that they will invest in these technologies over the next 12 months. Some 40% want more robotics; 55% are investing in enterprise resource planning (ERP) and warehouse management systems (WMS); and 71% are buying more material handling equipment. Common reasons for making these investments include offsetting the tight labor market, staying out in front of customer demands, adapting to the omni-channel distribution environment, and accelerating activity in a business world that demands it.

Industry Terms

3PL – Third Party Logistics

Firms that provide supply chain management services.

AS/RS

Automated Storage and Retrieval Systems

Contract Warehouse

Warehouses that provide long term (multi-year) storage.

Cross Docking

Direct flow of goods from receiving to shipping with minimal to no intermediate storage.

Dock to Stock Time

Time from order receipt to availability.

Fill Rate

Percentage of orders Filled.

JIT – Just in Time

Production strategy that reduces in-process inventory and reduces carrying costs.

Pick to Light

Computer guided picking system.

Public Warehouse

Warehouses that generally provide short-term (month-to-month) storage.

VAWD –Value Added Warehousing and Distribution

Companies that provide services in addition to storage.

WMS – Warehouse Management Systems

Computerized information systems customized to support warehouse operations.

Web Links

[Modern Materials Handling]
News and trends

[Warehousing Education and Research Council]
News, trends, and industry research (for purchase)

[International Warehouse Logistics Association]
News, trends, and surveys ? publishes 3PL Americas magazine

[Global Cold Chain Alliance]
News, trends, and research on cold storage industry

[Armstrong and Associates]
News, trends, and surveys on logistics industry

Related Profiles

Auto Parts Distributors

NAICS: 423120 SIC: 5013, 5015, 5531

Beer Distributors

NAICS: 424810 SIC: 5181

Building Materials Distributors

NAICS: 4233 SIC: 5031, 5032, 5033, 5039

Crop Production

NAICS: 111 SIC: 01xx

Electrical Equipment Distributors

NAICS: 423610 SIC: 5063

Food Distributors

NAICS: 4244 SIC: 514x

Freight Forwarding Services

NAICS: 488510 SIC: 4731

Hardware, Plumbing & HVAC Distributors

NAICS: 4237 SIC: 5072, 5074, 5075, 5078

Industrial Machinery Distributors

NAICS: 423830 SIC: 5084

Industrial Supply Distributors

NAICS: 423840 SIC: 5085

Medical Equipment Distributors

NAICS: 423450 SIC: 5047

Paper Products Distributors

NAICS: 4241 SIC: 5111, 5112, 5113

Self Storage Services

NAICS: 531130 SIC: 4225

Wine & Spirits Distributors

NAICS: 424820 SIC: 5182

Niche Profiles

[Document Storage and Shredding Services]

NAICS: 493190 SIC: 4225

[Farm Product Storage]

NAICS: 493130 SIC: 4221

[Refrigerated Warehousing & Storage]

NAICS: 493120 SIC: 4222
