



FIBRE BOX ASSOCIATION®

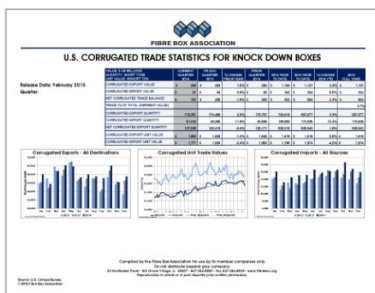
Fibre Box Association (FBA) Data Services Reports

Since 1940, we've been providing the corrugated industry with meaningful information about shipments, containerboard production, consumption and inventory. In addition, we've added valuable benchmarking reports through the years including the Key Performance Indicators (KPI) Survey, Sheet Plant Operating Ratio Survey, Productivity and Waste Survey, and our Labor Program. Most recently, we've added reports that provide top-line data and news on industry hot topics including e-commerce and labor, and information on the effort by companies and government organizations around the world to reduce single-use plastics.

But like the numbers, our reports don't remain static. We're continually working to enhance the data we provide to our members. Below is a brief description of each of the reports we offer:

Production

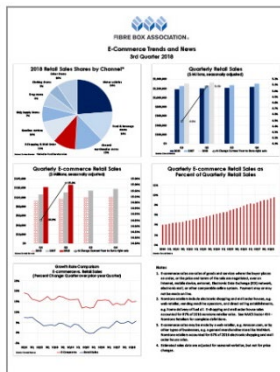
Corrugated Trade Report for Knock Down Boxes



The *Corrugated Trade Report for Knock Down Boxes* provides corrugated trade statistics and analysis, including key messages about the data in a bullet point format, on a quarterly basis.

International trade of corrugated packaging makes a significantly positive contribution to the U.S. balance of trade. Corrugated packaging exports amounted to more than \$1.2 billion in 2018. The Corrugated Trade Report was created to allow members to monitor trends in this growing segment of the corrugated market.

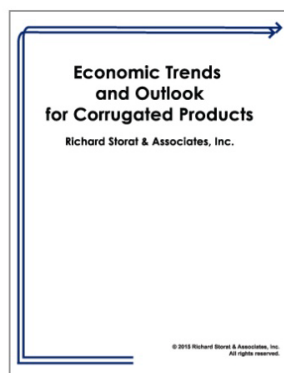
E-Commerce Trends and News



The *E-Commerce Trends and News* report provides top-line data and news on U.S. e-commerce activity in the form of charts, graphs and links to relevant information from the U.S. Census Bureau and media outlets.

Issued quarterly, the report includes charts and graphs on retail sales by channel, quarterly retail sales, quarterly e-commerce retail sales, quarterly e-commerce retail sales as a percent of quarterly retail sales, and a growth rate comparison between e-commerce and retail sales. In addition, gathered news from each quarter is summarized with links to articles and other information.

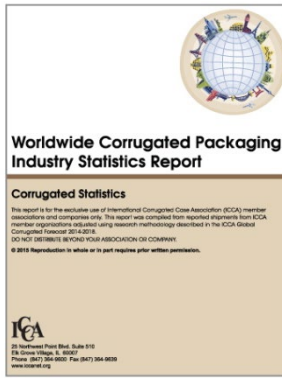
Economic Trends and Outlook for Corrugated Products



The *Economic Trends and Outlook for Corrugated Products* report contains both a U.S. and Canadian economic overview and information about several box consuming markets. Information is available for end-use markets such as meat and poultry, produce, dairy, cereals, beverages, and other food products plus durables and other non-durable goods. The report also includes a view of economic activity in each of the six FBA reporting areas.

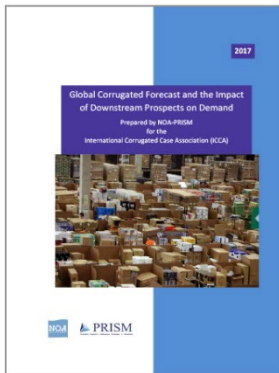
The report, published twice a year in February and July/August, is produced exclusively for FBA by Richard Storat and Associates and is only available to FBA members. Opinions and forecasts expressed in the report are those of Storat and Associates and do not necessarily reflect the views of FBA.

International Corrugated Packaging Industry Statistics



The *Worldwide Corrugated Packaging Industry Statistics Report* shows corrugated production/shipments by country and region as compiled by the International Corrugated Case Association (ICCA), of which FBA is a member.

Global Corrugated Forecast



The *Global Corrugated Forecast* addresses economic and business prospects along with key factors influencing corrugated demand and provides forecasts of corrugated production by country for six regions around the world: North America, Europe, the Pacific Rim, Asia, Central and South America, and Other Regions (including Australia, Africa, the Middle East and Central Asia). New to the 2017 report are identified “hot spots” and “unique activities”, notably the influence of consumers and retailers, on corrugated demand.

North American Containerboard Demand Report

The *North American Containerboard Demand Report* provides data for Canadian and U.S. production, shipments, inventory and apparent demand for containerboard as data points and graphs. The report is provided through cooperation with the American Forest and Paper Association (AF&PA) and Paper Packaging Canada (PPC) and is issued monthly to FBA members.

North American Corrugated Industry Bulletin

The *North American Corrugated Industry Bulletin* provides data for Canadian and U.S. shipments, consumption and inventory as data points and graphs. The report is being provided in cooperation with the Canadian Corrugated Containerboard Association (CCCA) and is issued monthly to FBA members.

U.S. Corrugated Industry Statistics (Quarterly Report)

The image shows the cover page of the 'U.S. CORRUGATED INDUSTRY STATISTICS' report. It features the FIBRE BOX ASSOCIATION logo at the top. Below the logo, there is a table with columns for 'MONTH' and 'YEAR TO DATE'. The table lists various metrics such as 'CORRUGATED Shipments (Actual)', 'Shipments (Average Week)', 'Consumption (Actual)', and 'Weeks of Supply - End of Month'. There are also sections for 'U.S. Corrugated Shipments', 'U.S. Corrugated Box Exports', and 'U.S. Month-End Containerboard Inventories'. At the bottom, there is a disclaimer: 'Compiled by the Fibre Box Association for use by its member companies only. Do not distribute beyond your company.' and a copyright notice for 2017.

The *U.S. Corrugated Industry Statistics* reports data on MSF shipments for the total industry broken down by the 25 FBA regions within 6 FBA reporting areas. The report also includes data on dollar value and price indexes, as well as, containerboard consumption, inventory and mill production. Data is included for each month and year-to-date compared to the previous year.

The report includes graphs with accompanying key message bullet points on U.S. corrugated shipments, U.S. corrugated box exports, U.S. month-end containerboard inventories, box shipments vs. U.S. production of non-durable goods, purchasing managers' index, purchasing managers' new orders index, industrial production of non-durable consumer goods, box shipments per unit of U.S. industrial production, non-durable goods trade deficit, inventory/sales ratios and U.S. exports of non-durable goods.

Statistical Bulletin

The image shows the cover page of the 'FIBRE BOX ASSOCIATION STATISTICAL BULLETIN'. It features the FIBRE BOX ASSOCIATION logo at the top. Below the logo, there is a table with columns for 'MONTH' and 'YEAR TO DATE'. The table lists various metrics such as 'INDUSTRY SHIPMENTS OF CORRUGATED PRODUCTS IN MILLIONS OF SQUARE FEET', 'CONTAINERBOARD CONSUMPTION IN MILLIONS OF SQUARE FEET', and 'REPORT USAGE NOTICE'. At the bottom, there is a disclaimer: 'This report is confidential and distributed only to authorized representatives. DO NOT DISTRIBUTE OR CIRCULATE BEYOND YOUR COMPANY.' and a copyright notice for 2017.

The *Statistical Bulletin* provides a one-page summary of the statistical report.

Industry Annual Report

The image shows the cover page of the 'Fibre Box Association Industry Annual Report'. It features the FIBRE BOX ASSOCIATION logo at the top. Below the logo, the title 'Fibre Box Association Industry Annual Report' is prominently displayed. At the bottom, there is a disclaimer: 'This report is confidential and distributed only to authorized representatives. DO NOT DISTRIBUTE OR CIRCULATE BEYOND YOUR COMPANY.' and a copyright notice for 2017.

The Annual Report provides data on U.S. corrugated industry statistics and trend data for the following categories:

- Shipments according to value, area, type of plant, and North American Industry Classification System (NAICS)
- Corrugated production by board type and basis weight
- Containerboard production, consumption and inventory
- Hours, earnings and productivity

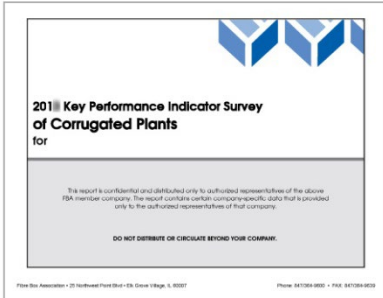
North American Industry Classification System (NAICS)

The image shows a table titled 'SHIPMENTS BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS)'. The table has columns for 'NAICS CODE', 'DESCRIPTION', and 'SHIPMENTS'. The table lists various industry codes and their corresponding descriptions, such as '2000 Agriculture, Forestry, Fishing and Hunting', '2100 Mining, Quarrying, and Oil and Gas Extraction', '2200 Utilities', '2300 Construction', '2400 Manufacturing', '2500 Wholesale Trade', '2600 Retail Trade', '2700 Food and Beverage Drinking Places', '2800 Accommodation and Food Services', '2900 Arts, Entertainment, and Recreation', '3000 Health Care and Social Assistance', '3100 Education and Health Services', '3200 Arts, Entertainment, and Recreation', '3300 Information', '3400 Real Estate and Rental and Leasing', '3500 Professional, Scientific, and Technical Services', '3600 Management of Companies and Enterprises', '3700 Administrative and Support and Waste Management and Remediation Services', '3800 Educational Services', '3900 Health Care and Social Assistance', '4000 Information', '4100 Real Estate and Rental and Leasing', '4200 Professional, Scientific, and Technical Services', '4300 Management of Companies and Enterprises', '4400 Administrative and Support and Waste Management and Remediation Services', '4500 Educational Services', '4600 Health Care and Social Assistance', '4700 Information', '4800 Real Estate and Rental and Leasing', '4900 Professional, Scientific, and Technical Services', '5000 Management of Companies and Enterprises', '5100 Administrative and Support and Waste Management and Remediation Services', '5200 Educational Services', '5300 Health Care and Social Assistance', '5400 Information', '5500 Real Estate and Rental and Leasing', '5600 Professional, Scientific, and Technical Services', '5700 Management of Companies and Enterprises', '5800 Administrative and Support and Waste Management and Remediation Services', '5900 Educational Services', '6000 Health Care and Social Assistance', '6100 Information', '6200 Real Estate and Rental and Leasing', '6300 Professional, Scientific, and Technical Services', '6400 Management of Companies and Enterprises', '6500 Administrative and Support and Waste Management and Remediation Services', '6600 Educational Services', '6700 Health Care and Social Assistance', '6800 Information', '6900 Real Estate and Rental and Leasing', '7000 Professional, Scientific, and Technical Services', '7100 Management of Companies and Enterprises', '7200 Administrative and Support and Waste Management and Remediation Services', '7300 Educational Services', '7400 Health Care and Social Assistance', '7500 Information', '7600 Real Estate and Rental and Leasing', '7700 Professional, Scientific, and Technical Services', '7800 Management of Companies and Enterprises', '7900 Administrative and Support and Waste Management and Remediation Services', '8000 Educational Services', '8100 Health Care and Social Assistance', '8200 Information', '8300 Real Estate and Rental and Leasing', '8400 Professional, Scientific, and Technical Services', '8500 Management of Companies and Enterprises', '8600 Administrative and Support and Waste Management and Remediation Services', '8700 Educational Services', '8800 Health Care and Social Assistance', '8900 Information', '9000 Real Estate and Rental and Leasing', '9100 Professional, Scientific, and Technical Services', '9200 Management of Companies and Enterprises', '9300 Administrative and Support and Waste Management and Remediation Services', '9400 Educational Services', '9500 Health Care and Social Assistance', '9600 Information', '9700 Real Estate and Rental and Leasing', '9800 Professional, Scientific, and Technical Services', '9900 Management of Companies and Enterprises'.

The *North American Industry Classification System (NAICS)* is the standard used by federal statistical agencies in classifying business establishments and captures business activity across North America. FBA requests NAICS shipment data from members annually. The report is used for the FBA Industry Annual Report and all Forecast Reports.

Benchmarking

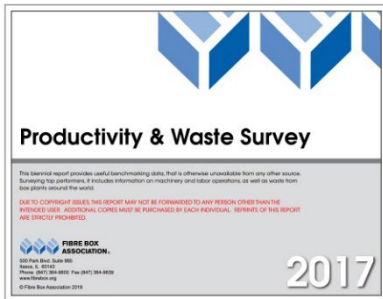
Key Performance Indicator Survey (KPI)



The *Key Performance Indicator Survey (KPI)* is a highly-valued benchmarking survey which includes data on sales/costs/profit ratio, capital, receivables, fixed assets, inventories and other key operating statistics at the corrugated plant level.

The report includes participation from approximately 500 plants operated by 50 companies.

Productivity & Waste Survey



The *Productivity & Waste Survey* provides useful benchmarking data on productivity, waste and starch consumption, and offers the best-in-class data for users to compare operations.

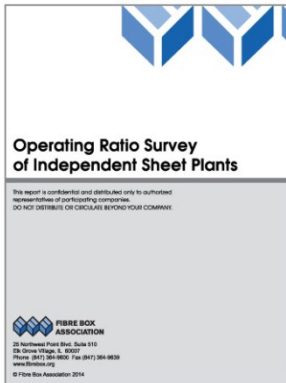
Participating companies are surveyed on their machinery, labor operations and waste. The Survey contains a summary and detailed report broken down by U.S. plants and by all other countries for:

- converting equipment
- reporting on basis weight, starch consumption & total plant productivity
- equipment listings by plant

Data is further segmented by machinery size in the following major finishing equipment categories:

- flexo-folder gluers; rotary die-cutters; and printers

Independent Sheet Plant Operating Ratio Survey (SPORS)



The *Independent Sheet Plant Operating Ratio Survey* provides participants with information that can be used to benchmark their operations against other facilities. The output report is available in three different formats: actual dollars, dollars per MSF and percentage of net sales and contains a section with fulfillment center and/or warehouse breakouts.

The report also includes plant annual sales history for the past five years. All data is de-identified and only available to participating members.

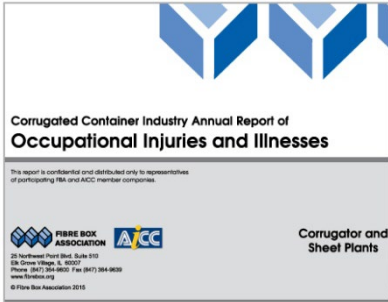
Wax Survey



Each year a wax survey is conducted to continually show the decrease in usage of wax coatings. The Corrugated Packaging Alliance (CPA) then releases a wax fact sheet using data from the survey.

Safety

Occupational Injuries & Illnesses Report (OII)



The Occupational Injuries and Illnesses report is a compilation of recordable employee injury and illness data for corrugator and sheet plants. Available only to participating members, the report is divided into two sections: the first presents data on sheet plants by category of hours worked and the second presents data on corrugator plants by category of hours worked.

The data in this report determines the annual FBA/AICC Safety Award winners. Annual Safety Awards are presented to those facilities having the lowest total case incidence rate for the preceding calendar year in five sheet plant and nine corrugator plant categories. Safety Excellence Awards are also presented to all sheet plant or corrugator facilities that attain a zero lost workday case (lost work days only) incidence rate during the calendar year.

Labor

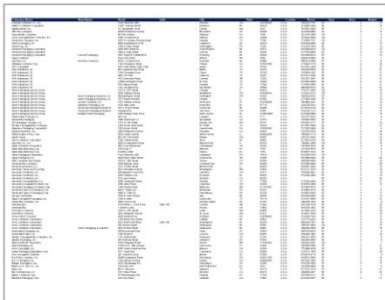
Labor Trends and News



The *Labor Trends and News Report* provides top-line data and news on U.S. labor-related activity. Issued quarterly, the report includes gathered news summarized with links to articles and other pertinent organizations and websites.

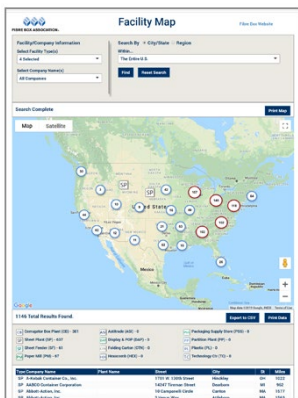
Informational

North American Directory of Corrugated Plants (online)



The *North American Directory of Corrugated Plants* lists companies and their related plant facilities that manufacture corrugated and solid fiber paperboard products in North America. The directory is formatted in an Excel spreadsheet, and includes type of plant, complete address and phone number.

Interactive Facility Map (online)



The interactive facility map offers information for industry facilities located in the United States. Members can search by type of facility, company, geographic location and by FBA region. The interactive map is linked to the FBA database and updated in real time. Current data includes all sheet plants, sheet feeders, corrugator box plants and paper mills. FBA is also working to add to our database other types of facilities including Asitrade operators, display & POPs, folding carton plants, Hexacomb plants, packaging supply stores, partition plants, plastic plants and technology centers.

Market Data (online)

MARKET DATA

2019

- January - Furniture

2018

- January - Commercial Building/Health/Residential
- February - Paper/Label
- March - Chemicals
- April - Military/Defense/Quick Mail/Pharma
- May - Health/Pharma
- June - State/Power/Manufacturing
- July - Pharmaceutical
- August - Materials
- September - Chemical & Plastics/Manufacturing
- October - Sporting Goods
- November - Chemical
- December - Medical/Device

2017

- January - Apparel and Footwear
- February - Automotive/Truck
- March - Personal Care/Fragrance
- April - Agriculture
- May - Consumer Goods/China
- June - Specialty
- July - Specialty
- August - Specialty
- September - Specialty
- October - Specialty
- November - Specialty
- December - Specialty

2016

- January - Apparel
- February - Consumer Goods
- March - Consumer Goods
- April - Consumer Goods
- May - Consumer Goods
- June - Consumer Goods
- July - Specialty
- August - Specialty
- September - Specialty
- October - Specialty
- November - Specialty
- December - Specialty

2015

- January - Consumer Goods
- February - Consumer Goods
- March - Consumer Goods
- April - Consumer Goods
- May - Consumer Goods
- June - Consumer Goods
- July - Consumer Goods
- August - Consumer Goods
- September - Consumer Goods
- October - Consumer Goods
- November - Consumer Goods
- December - Consumer Goods

Each month FBA highlights a different end-use market segment, offering current news and developments with links to further information. We pull information from a variety of sources so members can see the overall picture on the market segments that might affect their business.

Plastic Reduction Effort

Company	Link	Name/Year/Percentage/Target	Goals	Sustainability Report/Policy	Page #
Procter & Gamble	https://www.pg.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	Procter & Gamble 2025 50% reduction in plastic packaging by weight	Working for all our packaging to be recyclable, reusable or compostable by 2025.	https://www.pg.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	1
Amazon	https://www.amazon.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	Amazon 2025 50% reduction in plastic packaging by weight	Aiming to make 100% of its packaging recyclable, reusable or compostable by 2025.	https://www.amazon.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	1
Johnson & Johnson	https://www.jnj.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	Johnson & Johnson 2025 50% reduction in plastic packaging by weight	Using more recycled materials in packaging, reducing our use of single-use plastics, and ensuring that 100% of our packaging is recyclable, reusable or compostable through a combination of design, partnership and innovation by 2025.	https://www.jnj.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	1
Walmart	https://www.walmart.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	Walmart 2025 50% reduction in plastic packaging by weight	Working to make 100% of our packaging recyclable, reusable or compostable by 2025.	https://www.walmart.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	1
Target	https://www.target.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	Target 2025 50% reduction in plastic packaging by weight	Working to make 100% of our packaging recyclable, reusable or compostable by 2025.	https://www.target.com/our-story/our-commitment-to-sustainability/our-plastic-reduction-goals	1

Many companies and government organizations around the world have committed to the reduction of single-use plastics as part of their sustainability goals. FBA has created a spreadsheet (updated monthly) with detailed information on the plastic reduction effort.