

## The Growth of E-Commerce

### Retail - U.S.

U.S. e-commerce on the retail level continues to grow at a steady rate. The Census Bureau of the U. S. Department of Commerce [reports](#) that **retail e-commerce sales** (B-to-C) in the United States increased to \$14,334 million (\$14 billion) in the fourth quarter of 2002, up from \$11,178 million in the fourth quarter of 2001, an increase of 28.2 percent, as shown in the table below. The increase of total retail e-commerce sales between the year of 2002 and that of 2001 is 26.8 percent.

Compared to data for the third quarter of 2002, e-commerce sales for the fourth quarter of 2002 increased 29.6 percent and total sales 5.1 percent.

E-commerce sales accounted for 1.65 percent of total sales in the fourth quarter of 2002, up from 1.34 percent in the third quarter of 2002.

E-commerce sales are [defined](#) as sales of goods and services over the Internet, an extranet, Electronic Data Interchange (EDI), or other online systems. Payment may or may not be made online. This definition corresponds to business-to-consumer e-commerce.

Period	Retail Sales		E-commerce as percent of total sales	Quarter-to-Quarter/Year-to-Year Percent Change in Sales	
	E-commerce	Total		E-commerce	Total
1999, 4Q	5,481	784,278	0.70	(NA)	8.6
2000, 1Q	5,814	711,600	0.82	6.1	-9.3
2000, 2Q	6,345	771,691	0.82	9.2	8.4
2000, 3Q	7,266	765,536	0.95	14.5	-0.8
2000, 4Q	9,459	810,311	1.17	30.2	5.9
Year 2000	28,885	3,059,138	0.94	(NA)	7.7
2001, 1Q	8,256	724,224	1.14	-12.7	-10.6
2001, 2Q	8,246	805,245	1.02	-0.1	11.2
2001, 3Q	8,236	782,088	1.05	-0.1	-2.9
2001, 4Q	11,178	856,285	1.31	35.7	9.5
Year 2001	35,916	3,167,842	1.13	24.3	3.6
2002, 1Q	9,880	743,810	1.33	-11.6	-13.1
2002, 2Q	10,265	825,243	1.24	3.9	10.9
2002, 3Q	11,061	827,461	1.34	7.8	0.3
2002, 4Q	14,334	869,588	1.65	29.6	5.1
Year 2002	45,540	3,266,102	1.39	26.8	3.1

Source: United States Department of [Commerce News](#), February 24, 2003.  
Excludes food services.

U.S. Retail Sales by type of channel in millions (e-commers) and billions (total sales) of U.S. dollars.

NAICS code	Description	2001				E-growth 2001 /2000 %	2000 E-commerce million	1999 E-commerce million
		E-Commerce million	Total billion	E/Total %	E-distr. %			
	Total Retail Trade	34,382	3,141	1.09	100.0	92.2	28,152	15,000
441	Motor vehicle and parts dealers	5,372	840	0.64	15.6	158.0	4,296	1,794
442	Furniture and home furnishings stores	N/A	90	N/A	N/A	N/A	N/A	N/A
443	Electronics and appliance stores	601	85	0.71	1.7	123.7	506	246
444	Building materials, garden equipment and supplies stores	525	289	0.18	1.5	N/A	447	N/A
445	Food and beverage stores	N/A	481	N/A	N/A	N/A	N/A	N/A
446	Health and personal care stores	N/A	168	N/A	N/A	N/A	N/A	38
447	Gasoline stations	N/A	245	N/A	N/A	N/A	N/A	N/A
448	Clothing and clothing accessories stores	400	167	0.24	1.2	201.2	254	86
451	Sporting goods, hobby, book and music stores	505	79	0.64	1.5	59.9	400	262
452	General merchandise stores	N/A	430	N/A	N/A	N/A	N/A	N/A
453	Miscellaneous store retailers	512	107	0.48	1.5	56.2	383	251
454	Nonstore retailers	25,865	161	16.11	75.2	83.4	21,428	11,768
454119	Electronic shopping and mail-order houses	25,680	109	23.51	74.7	82.3	21,209	11,719

Source: 2001 Annual Retail Trade Survey, plus revised data for 2000 and 1999.

The largest channels using electronic commerce are nonstore retailers with 75.2 percent, electronic shopping and mail-order houses with 74.7 percent and motor vehicles and parts dealers with 15.6 percent of all e-commerce sales.

## Business-to-Business - U.S.

The Census Bureau of the U. S. Department of Commerce has published the following data regarding shipments by manufacturers and wholesalers, giving indications of business-to-business (B-to-B) trade. The ratio of e-commerce sales to total sales is 14 times higher for sales by manufacturers and six times higher for merchant wholesale, than for retail sales.

Within merchant wholesale trade, 88.3 percent of e-commerce were conducted via electronic data interface (EDI) networks. The ratio of EDI to e-commerce ranges between 71.8 to 100 percent for different industry groups. Heavy users of EDI are drugs and druggists' sundries with 31.1 percent and motor vehicles, parts and supplies with 21.2 percent (that is the group that started EDI) followed by professional and commercial equipment and supplies with 10.6 percent of all EDI sales.

Value of shipments in billions of U.S. dollars in 2000 and 1999.

NAICS code	Description	2000				E-growth 2000/1999 %	1999	
		E-Com - merce	Total	E/Total %	E- distr. %		E- Com - merce	Total
	Manufacturing	777	4,218	18.4	100.0	6.5	730	4,032
311	Food products	55	434	12.6	7.1	19.8	46	426
312	Beverage and tobacco	43	112	38.3	5.5	22.0	35	107
325	Chemicals	53	452	11.7	6.8	7.4	43	420
333	Machinery	40	207	13.7	13.7	-16.5	48	277
334	Computers and electronic products	78	513	15.2	10.0	19.3	47	458
336	Transportation equipment	294	639	46.1	37.9	9.6	140	675
	Other manufactured products	214	1,861	11.5	19.0	20.2	178	1,779
	Merchant wholesale	213	2,750	7.7	100.0	59.0	134	2,541
421	Durable goods	107	1,434	7.5	50.2	50.7	71	1,354
4211	Motor vehicles and parts	40	200	20.0	18.8	21.2	33	197
42143	Computers	18	165	11.0	8.5	12.5	16	161
	Other durable goods	49	1,069	4.6	23.0	113.0	23	995
422	Nondurable goods	105	1,316	8.0	49.3	66.7	63	1,187
4222	Drugs and sundries	66	167	3.2	31.0	40.4	47	146
	Other nondurable goods	39	1,150	3.4	18.3	143.8	16	1,041

Detailed information is available at [www.census.gov/eos/www/ebusiness614.htm](http://www.census.gov/eos/www/ebusiness614.htm).

## **B-to-C and B-to-B - Global, U.S., and Other Areas - Other Sources**

Many official entities and private research firms have estimated recent and future levels of e-commerce sales. The Organization for Economic Co-operation and Development (OECD) have compiled a table of the value of B2C e-commerce in some 21 countries in the year 2000 (or latest available year).

Country	Value in millions of US\$	Percent of retail sales (%)	Number of buyers ('000's)	Number of buyers as a percentage of Internet users (%)	Internet users as a percentage of working age population (%)
Australia	380	0.38	1,335	10	4
Austria	96	0.23	120	13	2.2
Belgium	82	0.16	90	11	3
Canada	774	0.26	811	12	4.0
Denmark	193	0.20	90	16	9
Finland	51	0.22	160	10	4.7
France	345	0.14	310	7	2
Germany	1,199	0.30	1,370	17	5
Greece	N/A	N/A	30	11	0.4
Ireland	N/A	N/A	40	13	1.6
Italy	194	0.09	360	7	1
Japan	7,644	0.26	N/A	20	6

Korea	1,008	1.0	2,140	15	7.7
Netherlands	182	0.34	320	12	5
Norway	61	0.26	100	19	11
Portugal	N/A	N/A	50	10	1
Spain	N/A	N/A	220	7	1
Portugal and Spain combined	70	0.06			
Sweden	232	0.68	260	10	4.6
Switzerland	127	0.29	130	12	2.7
United Kingdom	1,040	0.37	970	8	5
United States	25,845	1.01	19,666	27	16

Source: "[Business-to-Consumer E-Commerce Statistics](#)", a presentation at an OECD workshop in Berlin, Germany, March 13-14, 2001.

Some growth values are shown in the chart below. Forrester Research, Inc., Cambridge, Massachusetts ([www.forrester.com](http://www.forrester.com)) estimates a global level of \$6,900 billion in 2004, and Jupiter Communications predicts a level of U.S. business-to-business e-commerce of \$6,300 in 2005. The International Organisation for Economic Co-operation and Development (OECD, [www.oecd.org](http://www.oecd.org)), based in Paris, estimates global sales to reach \$6,500 billion in 2002, a value so extreme that it is not included in the chart.

(B2B = business-to-business, and B2C = business-to-consumer)

The above chart shows the high values published by Forrester. It also shows low values published by the International Data Corporation (IDC), Farmingdale, Massachusetts, ([www.idc.com](http://www.idc.com)), and by the U. S. Bureau of the Census. Each predicts doubling of sales each year in the future through 2003.

Forrester predicts e-commerce sales of about \$1.5 trillion in Europe and the Asia-Pacific area in 2004 with some 93 percent being business-to-business.