

2016 AD-TO-SALES RATIOS

Industry Name	SIC Code	2015	2016	Annual	Annual	2016	2016
		Ad Spending (\$ Millions)	Ad Spending (\$ Millions)	Ad Growth Rate (%)	Ad Sales Growth Rate (%)	Ad \$ as % of Sales	Ad \$ as % of Margin
ABRASIVE,ASBESTOS,MISC MINRL	3290	8.844	7.503	-16.7	-4.3	0.1	0.5
ACCIDENT & HEALTH INSURANCE	6321	211	198.483	-6.5	-4.8	1	4.9
ACCOUNT,AUDIT,BOOKKEEP SVCS	8721	18.2	17.868	-3.2	4.5	1	2.8
ADVERTISING	7310	92.566	96.264	3.8	2.9	1.5	3.1
ADVERTISING AGENCIES	7311	0.026	0	-100	1.9	0	0
AGRIC PROD-LVSTK,ANIMAL SPEC	200	15.176	18.074	17.2	10.1	0.7	2.2
AGRICULTURAL CHEMICALS	2870	2233.22	2150.49	-4.2	-0.9	3.4	8.9
AGRICULTURAL SERVICES	700	33	35.49	7.4	6.7	1.5	5.5
AGRICULTURE PRODUCTION-CROPS	100	198.753	191.551	-1.3	1.5	0.9	1.8
AIR COURIER SERVICES	4513	477.219	454.658	-3.5	2	0.6	2.8
AIR TRANSPORT, SCHEDULED	4512	2740.35	2753.23	1.4	3.5	0.7	2.6
AIR-COND,HEATING,REFRIG EQ	3585	77.437	79.268	1.6	-3.9	0.6	1.6
AIRCRAFT	3721	0.321	0.274	-15.8	2.2	0.1	0.2
AIRPORTS & TERMINAL SERVICES	4581	0.045	0.054	11.8	12.5	0.3	0.5
AMUSEMENT & RECREATION SVCS	7900	456.529	492.187	7.6	7.5	4.7	16
AMUSEMENT PARKS	7996	228.856	229.285	0	2	5.8	12.1
APPAREL & OTHER FINISHED PDS	2300	1805.78	1949.19	7.7	7.5	4.2	8.5
APPAREL AND ACCESSORY STORES	5600	665.028	721.22	8.1	5.5	3.7	9
APPAREL,PIECE GDS,NOTNS-WHSL	5130	14.417	15.11	4.8	3.4	3.7	10.3
AUTO AND HOME SUPPLY STORES	5531	311.924	338.422	7.8	10.5	1.1	2.1
AUTO DEALERS, GAS STATIONS	5500	819.861	889.697	8.1	4.7	0.7	4.7
AUTO RENT & LEASE,NO DRIVERS	7510	395.895	410.003	3.5	2.3	1.4	3.2
AUTO REPAIR,SERVICES,PARKING	7500	3.356	3.905	15.7	5.6	0.1	1.4
BAKERY PRODUCTS	2050	4.403	4.954	11.8	1.4	0.5	1.4
BALL AND ROLLER BEARINGS	3562	0.524	0.57	8	-8.3	0.5	1.4
BEVERAGES	2080	2400	2394.59	-0.2	-2.2	3.9	6.5
BIOLOGICAL PDS,EX DIAGNSTICS	2836	2109.03	2414.36	12.9	14.1	1.7	2.2
BITUMINOUS COAL, LIGNITE MNG	1220	7	8.5	19.5	-10.2	0.3	-4.6
BLANKBOOKS,BINDERS,BOOKBIND	2780	208.296	197.41	-5.8	-0.8	6	11.3
BLDG MATL,HARDWR,GARDEN-RETL	5200	121.936	128.327	5.1	7.9	1.2	3.4
BOOKS: PUBG, PUBG & PRINTING	2731	519.643	541.164	4	-7.9	4.7	7.8
BRDWOVEN FABRIC MILL, COTTON	2211	1.994	2.212	10.4	1.1	0.2	1.1
BTLD & CAN SOFT DRINKS,WATER	2086	5497.17	5517.63	0.8	-4.7	5.6	10.3
BUSINESS SERVICES, NEC	7389	261.453	290.818	11.1	5.9	1.2	2.8
CABLE AND OTHER PAY TV SVCS	4841	5361.88	6372.29	18.5	6.2	2.9	6.5
CALCULATE,ACCT MACH,EX COMP	3578	110.562	110.056	-0.7	1.2	0.7	2.2
CAN FRUIT,VEG,PRESRV,JAM,JEL	2033	113.069	111.1	-1.8	0.9	1.3	4.3
CAN,FROZN,PRESRV FRUIT & VEG	2030	991.41	1147.81	14.6	21.5	2.7	7.8
CARPETS AND RUGS	2273	58.111	66.683	12.6	4.7	0.7	1.8
CATALOG, MAIL-ORDER HOUSES	5961	7061.96	8148.59	14.2	14	3.8	12.5
CEMENT, HYDRAULIC	3241	2.509	2.049	-23.1	-1.5	0.6	1.3
CIGARETTES	2111	643.754	668.404	2.7	-2	0.7	1.3
CMP AND CMP SOFTWARE STORES	5734	67.808	69.032	1.8	1.7	0.7	2.2
CMP INTEGRATED SYS DESIGN	7373	199.882	208.542	3.7	-0.8	0.2	0.5
CMP PROCESSING,DATA PREP SVC	7374	2885.34	3047.94	5.2	3.6	3	7.1
CMP PROGRAMMING,DATA PROCESS	7370	26152.2	29150.5	10.3	4.9	6.9	11.2
COGENERATN-SM POWER PRODUCER	4991	1.844	2.202	18.2	7.3	0.4	2
COML PHYSICAL, BIOLOGCL RESH	8731	51.974	57.585	10.3	8.7	0.4	1.1
COMMERCIAL BANKS	6020	0.651	0.738	13.2	-5.6	1.4	5.6
COMMERCIAL PRINTING	2750	0.309	0.267	-14.8	3.2	0.5	2
COMMUNICATIONS EQUIP, NEC	3669	36.872	35.188	-4.8	-3	0.3	0.8

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COMMUNICATIONS SERVICES, NEC	4899	1791.49	1843.74	2.8	1.9	5.6	11.5
COMPUTER & OFFICE EQUIPMENT	3570	1285.57	1263.22	-1.8	-2.7	0.7	2.2
COMPUTER COMMUNICATION EQUIP	3576	290.261	289.441	-0.2	2.3	0.4	0.7
COMPUTER PERIPHERAL EQ, NEC	3577	1043.49	953.72	-8.6	-4.3	2.4	4.3
COMPUTER PROGRAMMING SERVICE	7371	1.285	1.232	-4	9	0	0
COMPUTER STORAGE DEVICES	3572	234.957	256.513	8.6	-0.2	0.4	0.8
COMPUTERS & SOFTWARE-WHSL	5045	677.736	726.272	6.8	2.5	0.6	6.5
CONCRETE PDS, EX BLOCK,BRICK	3272	23.033	25.164	8.4	11.3	0.8	2.8
CONCRETE,GYPSUM,PLASTER PDS	3270	39.782	46.938	15.6	7.3	0.5	1.7
CONGLOMERATE	9997	1474.04	1348.82	-8.7	-5.6	1.1	30.8
CONSTR,MINING,MATL HANDLE EQ	3530	47.425	44.547	-6.1	-9.6	0.3	0.9
CONSTRUCTION MACHINERY & EQ	3531	87.766	87.832	-0.6	-8.3	0.1	0.4
CONSTRUCTION-SPECIAL TRADE	1700	8.151	7.839	-4.2	7.9	0.2	0.7
CONVENIENCE STORES	5412	0.115	0.118	3.1	2.6	0.4	1
CONVRT PAPR,PAPRBRD,EX BOXES	2670	628.226	606.169	-2.9	-1.6	0.9	2.2
COOKIES AND CRACKERS	2052	31.8	35.011	7.3	-3.4	2.2	5.4
CREDIT REPORTING SERVICES	7323	310.379	322.025	3.7	5.1	2.1	3
CRUDE PETROLEUM & NATURAL GS	1311	12.165	8.537	-46.3	-16.3	0	0.2
CUT STONE AND STONE PRODUCTS	3281	22.38	24.708	10.2	14	4.3	9.9
CUTLERY, HANDTOOLS,GEN HRDWR	3420	553.443	441.612	-22.9	-6.4	3.9	8.3
DAIRY PRODUCTS	2020	1052.45	1224	15.1	0.3	4	14.3
DENTAL EQUIPMENT & SUPPLIES	3843	50.837	53.569	5.1	-0.8	1.5	2.2
DEPARTMENT STORES	5311	3985.04	3686.11	-7.8	-6.4	4.1	11.7
DETECT,GUARD,ARMOR CAR SVCS	7381	0.202	0.237	16.5	-12.3	0	0
DISTILLED AND BLENDED LIQUOR	2085	2356.66	2305.19	-2.2	-0.2	10.9	18.2
DIVERSIFIED MULTI-MEDIA	4888	11908.8	12238.2	3.2	3.1	7.2	15
DOLLS AND STUFFED TOYS	3942	733.652	686.87	-6.6	-5.1	11.2	23.1
DRAWNG,INSULATNG NONFER WIRE	3357	27.936	31.271	11.6	2	0.8	2.3
DRUG & PROPRIETARY STORES	5912	1285.66	1360.93	5.7	7.5	0.3	1.7
DRUGS AND PROPRIETARY-WHSL	5122	1552.79	1586.6	2.4	10.4	0.3	5.4
DURABLE GOODS-WHOLESALE	5000	230.712	226.145	-2.3	-6.7	0.4	1.5
EATING AND DRINKING PLACES	5810	81.069	83.983	3.5	4.2	1.9	7.8
EATING PLACES	5812	3727.66	3744.03	0	2	2.4	8.8
EDUCATIONAL SERVICES	8200	2059.46	2005.64	-2.7	-2.9	9.6	21.8
ELEC APPARATUS & EQUIP-WHSL	5063	5.197	6.355	20.1	-2.3	0	0.2
ELEC MEAS & TEST INSTRUMENTS	3825	35.789	39.268	9.3	2.4	0.5	0.8
ELECTR COIL,TRANSFRM,INDUCTR	3677	0.005	0.005	3.2	18	0	0.1
ELECTR, OTH ELEC EQ, EX CMP	3600	4168.68	3838.54	-8.3	-6.3	2	8.7
ELECTRIC HOUSEWARES AND FANS	3634	136.822	137.442	-1.1	1.2	4.6	12.1
ELECTRIC LIGHTING, WIRING EQ	3640	43.799	48.217	9.3	8.4	0.5	1.3
ELECTRIC SERVICES	4911	220.438	194.667	-13.4	-3.3	0.5	-9.1
ELECTRICAL INDL APPARATUS	3620	975.098	994.251	2	-1	3	8.1
ELECTROMEDICAL APPARATUS	3845	251.499	266.892	5.7	6	0.5	0.7
ELECTRONIC COMP, ACCESSORIES	3670	149.95	146.484	-2.7	-0.8	0.9	2.6
ELECTRONIC COMPONENTS, NEC	3679	341.444	361.584	5.8	0	1	3
ELECTRONIC COMPUTERS	3571	2.3	2.895	19	-1.5	0.4	1.1
ELECTRONIC CONNECTORS	3678	0.143	0.115	-22.5	0.9	0.4	1.2
ELECTRONIC PARTS,EQ-WHSL,NEC	5065	71.12	73.089	2.6	3.8	0.1	0.9
EMPLOYMENT AGENCIES	7361	150.192	163.786	8.8	11.1	1.9	7
ENGINEERING SERVICES	8711	147.122	165.552	12.5	7.2	0.3	1
ENGINES AND TURBINES	3510	569.168	599.256	4.6	2.8	1.9	7

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ENGR,ACC,RESH,MGMT,REL SVCS	8700	36.459	38.477	5	5.8	0.3	0.5
EQUIP RENTAL & LEASING, NEC	7359	250.437	262.892	4.6	20.7	1.5	1.8
FABRICATED PLATE WORK	3443	6.858	6.785	-2.9	-7.4	0.5	1.8
FABRICATED RUBBER PDS, NEC	3060	28.298	29.133	2.7	1.6	1.9	4.9
FABRICATED STRUCTURAL METAL	3440	22.798	31.634	33.6	3.3	2	15
FAMILY CLOTHING STORES	5651	1757.13	1823.19	3.7	3.7	1.9	5.5
FARM MACHINERY AND EQUIPMENT	3523	563.67	545.571	-4.7	-16.9	0.8	3.2
FARM-PRODUCT RAW MATL-WHSL	5150	5.2	4.891	-5.6	-15.4	0.1	1
FINANCE LESSORS	6172	210.877	234.161	10.5	10.7	0.8	2.3
FINANCE SERVICES	6199	1611.7	1518.13	-5.6	-2	1.7	4.2
FIRE, MARINE, CASUALTY INS	6331	5078.65	5496.75	8.2	-2.3	1.1	8.8
FOOD AND KINDRED PRODUCTS	2000	9935.75	9284.91	-6.7	-7.7	5.8	12.3
FOOD STORES	5400	148.649	150.678	1.4	5	2.7	7.6
FOOTWEAR, EXCEPT RUBBER	3140	273.105	303.195	10.8	7.1	2.7	6.5
FUNCTIONS REL TO DEP BKG,NEC	6099	1957.81	2076.51	5.5	5.8	5.3	9.5
FURNITURE STORES	5712	412.959	468.795	12.7	14.3	6.4	15.5
GAMES,TOYS,CHLD VEH,EX DOLLS	3944	661.693	427.283	-18.2	-13.6	6.8	10.2
GENERAL INDL MACH & EQ, NEC	3569	12.221	12.718	4	3.1	0.7	1.2
GENERAL INDUSTRIAL MACH & EQ	3560	196.601	190.799	-2.9	1.2	0.4	1.1
GLASS PD,MADE OF PURCH GLASS	3231	1.687	1.765	4.6	9.5	0.1	0.4
GLASS,GLASSWR-PRESSED,BLOWN	3220	10.7	10.859	0.8	0.8	1.3	4.6
GOLD AND SILVER ORES	1040	115.075	128.622	11.2	-7	0.4	1.1
GRAIN MILL PRODUCTS	2040	2425.13	2451.11	2.2	-3.6	6.1	16.9
GROCERIES & RELATED PDS-WHSL	5140	1361.83	1411.92	3.7	5.3	1.3	7.7
GROCERIES, GENERAL LINE-WHSL	5141	47.7	62.296	25.7	33.5	0.6	4
GROCERY STORES	5411	2772.19	2842.49	2.5	2.7	0.8	3
HARDWARE-WHOLESALE	5072	32.612	30.595	-6.4	6	1.9	12.7
HARDWR, PLUMB, HEAT EQ-WHSL	5070	40.654	38.666	-4.9	-1.7	0.1	0.5
HAZARDOUS WASTE MANAGEMENT	4955	48.571	58.495	17	7.1	0.7	2
HEALTH SERVICES	8000	0.862	0.863	0.1	8.5	1.3	6.5
HEAVY CONSTR-NOT BLDG CONSTR	1600	342.064	242.777	-5.5	-8.4	0.5	4
HELP SUPPLY SERVICES	7363	156.286	163.311	4.5	2.7	0.4	1.6
HOBBY, TOY, AND GAME SHOPS	5945	512.857	476.585	-7.4	-1.1	2.8	7.2
HOME FURNITURE & EQUIP STORE	5700	898.807	938.203	4.3	2.6	3.9	10.6
HOME HEALTH CARE SERVICES	8082	142.162	152.381	6.5	6.4	2.1	6.4
HOSPITAL & MEDICAL SVC PLANS	6324	1374.19	1392.06	1.1	10.6	0.3	1.3
HOSPITALS	8060	24.41	28.708	17.1	14.4	0.3	1.1
HOTELS AND MOTELS	7011	764.608	796.889	0.7	3.8	1.5	5.2
HOTELS, OTHER LODGING PLACES	7000	0.049	0.049	-1.6	6.8	0.6	0.6
HOUSEHOLD APPLIANCES	3630	641.56	647.724	0.9	-0.1	1.8	8
HOUSEHOLD AUDIO & VIDEO EQ	3651	423.817	398.406	-6.2	-2	1.4	5.7
HOUSEHOLD FURNITURE	2510	928.453	1056.31	12.2	5.5	8.4	21.6
ICE CREAM & FROZEN DESSERTS	2024	0.236	0.229	-4.3	-3.3	1.7	6.6
IN VITRO,IN VIVO DIAGNOSTICS	2835	64.298	67.48	4.9	5.4	0.8	1.4
INDL COML FANS,BLOWRS,OTH EQ	3564	1	1.388	29.4	12.6	0.3	1
INDL INORGANIC CHEMICALS	2810	324.571	318.907	-2.2	-4.1	0.6	1.7
INDL TRUCKS,TRACTORS,TRAILRS	3537	12.653	12.887	1.9	1.6	0.4	2.4
INDUSTRIAL MACH & EQ-WHSL	5084	102.314	111.517	9.4	-1.4	0.9	1.9
INDUSTRIAL MEASUREMENT INSTR	3823	8.764	9.483	6.9	6.9	0.1	0.1
INDUSTRIAL ORGANIC CHEMICALS	2860	89.271	88.945	-0.4	-6.4	0.1	0.4
INS AGENTS,BROKERS & SERVICE	6411	93.437	101.505	8.2	-5.3	0.3	1

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INVESTMENT ADVICE	6282	3311.9	3396.83	1.5	0.9	2.6	7.1
INVESTORS, NEC	6799	0.584	0.773	25.6	5.1	2.9	-3
JEWELRY STORES	5944	750.625	821.705	9.1	9.5	5.8	12.2
JEWELRY,SILVERWR,PLATED WARE	3910	0.063	0.049	-40.6	-60.1	7.8	11.9
KNIT OUTERWEAR MILLS	2253	1.188	1.28	7.5	-18.3	2	9
KNITTING MILLS	2250	181.956	210.111	12.3	9.6	3.3	8
LAB ANALYTICAL INSTRUMENTS	3826	255.963	265.527	3.2	3.6	0.4	0.7
LAB APPARATUS AND FURNITURE	3821	1.047	1.089	4	0.2	0.8	3.3
LEATHER AND LEATHER PRODUCTS	3100	354.341	399.16	11.9	-3.1	5.8	9.6
LIFE INSURANCE	6311	10	9.625	-3.8	-4.6	0.3	1.1
LOAN BROKERS	6163	204.6	250.551	20.8	-7	13.3	93.2
LUMBER & OTH BLDG MATL-RETL	5211	2434.43	2469.59	1.3	3.5	1.4	4.1
LUMBER AND CONSTR MATL-WHSL	5030	6.115	7.161	16.5	7.6	0.1	0.5
LUMBER AND WOOD PDS, EX FURN	2400	23.4	24.681	5.6	-5.2	5	12.5
LUMBER, PLYWD, MILLWORK-WHSL	5031	0.5	0.304	-53	2	0	0.1
MACHINERY AND EQUIPMENT-WHSL	5080	3.326	5.192	54.5	6.7	0	0.1
MAGNETC,OPTIC RECORDNG MEDIA	3695	2.888	2.046	-37.1	-37.1	0.5	2.6
MAILING,REPRO,COMML ART SVCS	7330	296.082	317.079	6.9	9.9	18.3	27.3
MALT BEVERAGES	2082	4093.39	3962.47	-3.9	-6.1	4.3	7.7
MANAGEMENT CONSULTING SVCS	8742	210.757	217.076	3.2	4.1	0.5	1.8
MANAGEMENT SERVICES	8741	8.774	31.805	0	11.6	0.4	2.4
MANIFOLD BUSINESS FORMS	2761	1.137	1.162	2.2	2.2	0.2	0.6
MEAS & CONTROLLING DEV, NEC	3829	136.269	142.757	4.4	4.2	1.3	2.5
MEAT PACKING PLANTS	2011	1148.88	1299.71	12.4	6.5	1.9	12.3
MED, DENTAL, HOSP EQ-WHSL	5047	43.334	42.75	-2.2	6.4	0.1	0.6
MEDICAL LABORATORIES	8071	20.047	23.856	21	10	0.1	0.3
MEDICINAL CHEMS,BOTANICL PDS	2833	335.982	375.342	12.2	9.2	17.7	43.3
MEMBERSHIP SPORT & REC CLUBS	7997	26.706	30.028	12.1	8.3	1.5	5.7
MENS,BOYS FRNSH, WORK CLTHNG	2320	1257.24	1325.45	4.6	1.3	4.9	9.6
METAL DOORS,FRAMES,MOLD,TRIM	3442	25.167	25.472	2	-0.2	0.8	3
METAL FORGINGS AND STAMPINGS	3460	0.7	0.174	-75.1	-0.8	0	0.1
METAL MINING	1000	12	0	-100	-23	0	0
METALS SERVICE CENTERS-WHSL	5051	0.567	0.51	-10.7	-1.6	0	2.4
METALWORKING MACHINERY & EQ	3540	407.364	424.205	3.3	0.3	1.7	4.6
MILLWORK, VENEER, PLYWOOD	2430	283.86	284.889	0.8	6.2	3.2	10.7
MISC AMUSEMENT & REC SERVICE	7990	1435.76	1548.79	6.8	-4.5	2.8	6.3
MISC BUSINESS CREDIT INSTN	6159	5090.62	5271.67	3.6	-0.6	9.6	-10000
MISC BUSINESS SERVICES	7380	203.193	216.213	6.2	4.6	4.9	5.7
MISC CHEMICAL PRODUCTS	2890	209.619	212.178	1.2	1	1.5	3.7
MISC DURABLE GOODS-WHSL	5090	7.199	7.588	5.3	5.6	0.3	1
MISC ELEC MACHY, EQ, SUPPLIES	3690	373.444	371.926	-0.4	1.9	1.7	6.8
MISC EQUIP RENTAL & LEASING	7350	99.147	107.369	6.8	2.2	1	1.5
MISC FABRICATED METAL PRODS	3490	83.303	86.184	3.1	-0.1	0.4	1.3
MISC FOOD PREPS, KINDRED PDS	2090	348.598	335.536	-2.8	2	3.2	7.5
MISC FURNITURE AND FIXTURES	2590	7.229	7.797	7.6	6.6	0.4	0.7
MISC HEALTH & ALLIED SVC, NEC	8090	36.88	37.537	2	8.9	0.1	0.3
MISC INDL, COML, MACHY & EQ	3590	0.009	0.009	-2.6	10	0	0.1
MISC MANUFACTURNG INDUSTRIES	3990	170.217	179.022	5.3	4.9	5.8	14.5
MISC NONDURABLE GOODS-WHSL	5190	4.178	4.36	4.1	4.6	0	0.3
MISC PDS OF PETROLEUM & COAL	2990	1.288	1.474	14.5	-2.1	0.1	1.9
MISC PLASTICS PRODUCTS	3080	2.554	2.606	2	2.1	0.2	1

Source: Schonfeld and Associates, Inc. - 2016 Advertising Ratios and Budgets

2016 AD-TO-SALES RATIOS

Industry Name	SIC Code	2015	2016	Annual	Annual	2016	2016
		Ad Spending (\$ Millions)	Ad Spending (\$ Millions)	Ad Growth Rate (%)	Sales Growth Rate (%)	Ad \$ as % of Sales	Ad \$ as % of Margin
MISC SHOPPING GOODS STORES	5940	1505.11	1564.27	3.6	2.8	2.7	8.7
MISC TRANSPORTATION EQUIP	3790	112.445	125.635	9.5	9	1.2	5.3
MISCELLANEOUS PUBLISHING	2741	3.623	2.58	-34.9	-3	0.5	0.7
MISCELLANEOUS RETAIL	5900	134.354	124.071	-8	1	0.5	2.5
MOBILE HOMES	2451	0.251	0.278	10.1	4.1	0.8	3.6
MORTGAGE BANKERS & LOAN CORR	6162	214.102	176.116	-3.8	7.3	3.5	8.6
MOTION PIC, VIDEOTAPE PRODTN	7812	1609.03	1566.95	-4.2	-4.1	20.5	61.3
MOTION PICT, VIDEOTAPE DISTR	7822	22.552	26.107	14.9	13.8	2.6	4.7
MOTION PICTURE THEATERS	7830	114.089	117.911	3	2.9	0.7	3.2
MOTOR HOMES	3716	5.633	6.033	6.9	8.1	0.5	4.8
MOTOR VEH PARTS, SUPPLY-WHSL	5010	8.987	10.037	10.6	13.8	0.1	0.2
MOTOR VEH SUPPLY,NEW PTS-WHSL	5013	75	88.509	14.9	4.6	0.5	1.9
MOTOR VEHICLE PART,ACCESSORY	3714	1394.23	1434.62	2.3	-0.9	0.8	3.4
MOTOR VEHICLES & CAR BODIES	3711	41808.6	42271.6	1	-0.1	2.7	10.9
MOTORCYCLES,BICYCLES & PARTS	3751	121.332	134.951	10.7	2.2	2.1	4.4
MOTORS AND GENERATORS	3621	115.888	127.232	9.1	6.4	0.7	2.3
NEWSPAPER:PUBG, PUBG & PRINT	2711	768.692	795.933	3.6	-0.6	4.4	10.4
OFFICES OF MEDICAL DOCTORS	8011	5.7	7.883	30.1	19	1.6	6.1
OIL & GAS FIELD MACHY, EQUIP	3533	67.37	79.39	17.8	-14.3	0.3	0.4
OIL & GAS FIELD SERVICES,NEC	1389	152.102	144.653	-4.9	-5.9	0.2	0.9
OIL AND GAS FIELD EXPL SVCS	1382	0.466	0.405	-13.6	-12.3	0.2	6.1
OIL ROYALTY TRADERS	6792	0.046	0.051	10.3	-11.5	8.2	8.7
OPERATIVE BUILDERS	1531	447.502	502.577	11.3	15	0.7	3.2
OPERATORS-APARTMENT BLDGS	6513	0.165	0.201	20.1	5.1	0.4	0.8
OPERATORS-NONRES BLDGS	6512	69.259	67.683	-2.3	0.2	0.2	0.4
OPHTHALMIC GOODS	3851	838.813	868.011	3.4	-1.4	7.6	11.1
OPTICAL INSTRUMENTS & LENSES	3827	5.336	5.859	9.1	2.4	0.1	0.3
ORDNANCE AND ACCESSORIES	3480	164.389	154.919	-5.2	-7.9	2.2	7.7
ORTHO,PROSTH,SURG APPL,SUPLY	3842	497.124	530.862	6.2	5.9	1.5	2.3
PAINTS, VARNISHES, LACQUERS	2851	1057.19	1037.67	-1.9	-1.9	2	4.4
PAPER & PAPER PRODUCTS-WHSL	5110	0.9	1	10.6	6.8	0	0.1
PAPER MILLS	2621	1666.37	1661.24	-0.8	-2.8	2.3	9.7
PATENT OWNERS AND LESSORS	6794	323.492	383.444	14.2	6.9	5.2	6.5
PENS,PENCILS,OTH ARTIST MATL	3950	213.9	219.844	2	1.8	3.7	8.6
PERFUME,COSMETIC,TOILET PREP	2844	14596.1	14085.6	-3.8	-6	21.2	30
PERIODICAL:PUBG,PUBG & PRINT	2721	492.445	738.681	38.2	27.3	2.3	3.5
PERSONAL CREDIT INSTITUTIONS	6141	1847.69	1944.13	4.8	4	1.6	3.9
PERSONAL SERVICES	7200	822.271	789.696	-4.4	0.1	7.5	20.8
PETROLEUM REFINING	2911	3282.14	3044.8	-7.2	-32.9	0.2	1
PHARMACEUTICAL PREPARATIONS	2834	22730.8	22763.7	0.3	-0.2	4	5.2
PHONE COMM EX RADIOTELEPHONE	4813	11565.5	10523.7	-10	-6.2	2.3	5.1
PHONO RECRDS,AUDIO TAPE,DISK	3652	90.251	97.503	7.7	1.6	3.2	6.4
PHOTOGRAPHIC EQUIP & SUPPLY	3861	254.451	203.825	-20.4	-5.7	0.5	1.2
PLASTC,SYNTH MATLS;EX GLASS	2820	654.437	508.724	-22.5	-17	0.9	3
PLASTICS PRODUCTS, NEC	3089	249.492	254.031	0.6	1.4	1.3	3.4
PLASTICS,RESINS,ELASTOMERS	2821	142.057	147.354	3.2	-5.4	0.2	0.7
POULTRY SLAUGHTER & PROCESS	2015	208.846	259.12	21.6	7.7	1.2	4.7
PREFAB METAL BLDGS AND COMP	3448	8.757	9.726	10.5	7.8	0.6	2
PREFAB WOOD BLDGS,COMPONENTS	2452	3.034	2.475	-19.9	22.4	0	0.2
PREP FRESH,FROZN FISH, SEAFD	2092	10.199	10.365	1.6	1.1	0.3	1.5
PREPACKAGED SOFTWARE	7372	5691.7	6132.96	7.5	5.2	2.3	3.2

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2016 AD-TO-SALES RATIOS

Industry Name	SIC Code No.	2015	2016	Annual	Annual	2016	2016
		Ad Spending (\$ Millions)	Ad Spending (\$ Millions)	Ad Growth Rate (%)	Sales Growth Rate (%)	Ad \$ as % of Sales	Ad \$ as % of Margin
PRIM SMELT,REFIN NONFER METL	3330	1.285	1.247	-3.2	8.2	0.1	0.5
PRINTED CIRCUIT BOARDS	3672	3.2	3.765	13.6	3	0.5	1.2
PRINTING TRADES MACHY, EQUIP	3555	0.283	0.197	-41.3	19.5	0.2	0.4
PROF & COML EQ & SUPPLY-WHSL	5040	15.017	14.417	-4.1	2	0.3	1.1
PUBLIC BLDG & REL FURNITURE	2531	1.098	1.137	3.5	-5.3	0.6	1.6
PUMPS AND PUMPING EQUIPMENT	3561	90.702	94.515	4.7	-4.8	0.4	1.1
PWR,DISTR,SPECL TRANSFORMERS	3612	1.174	1.083	-8.8	1.2	0.2	0.7
RACING,INCL TRACK OPERATIONS	7948	34.659	34.508	-0.3	2	2.8	6.1
RADIO BROADCASTING STATIONS	4832	665.621	744.146	10.1	5.4	3.7	6.4
RADIO, TV BROADCAST, COMM EQ	3663	3296.04	3553.37	7.6	7.5	1	2.3
RADIO,TV,CONS ELECTR STORES	5731	826.75	793.462	-4.1	-3.4	2	7.3
RADIOTELEPHONE COMMUNICATION	4812	21667.5	21346.7	-0.7	-2.3	2.8	5.6
REAL ESTATE	6500	62.7	68.939	9.6	16.5	0.5	5.1
REAL ESTATE AGENTS & MGRS	6531	1537.26	1771.93	14	7.5	6.9	19.7
REAL ESTATE DEALERS	6532	16.4	18.05	9.4	13.8	2.2	4.4
REAL ESTATE INVESTMENT TRUST	6798	6069.61	6719.61	5.6	10.3	3.8	9.2
REAL ESTATE OPERATORS,LESSOR	6510	0.009	0	-100	16	0	0
RECORD AND TAPE STORES	5735	2.597	2.184	-17.4	-10.1	0.8	1.9
REFRIG & SERVICE IND MACHINE	3580	39.281	41.943	6.2	6.9	0.8	2
REFUSE SYSTEMS	4953	16.69	16.584	-0.5	0	0.1	0.2
RETAIL STORES, NEC	5990	557.959	618.961	10.5	8.4	5.2	11.7
ROLLING & DRAW NONFER METAL	3350	105.651	101.978	-4.6	-2.5	0.2	1
RUBBER AND PLASTICS FOOTWEAR	3021	3561.05	3745.27	5	7	9.7	19.4
SANITARY SERVICES	4950	0.356	0.403	12.7	4.1	0	0.3
SAUSAGE,OTH PREPARED MEAT PD	2013	213.386	227.724	7	-4.2	1.6	11.3
SAWMILLS, PLANING MILLS, GEN	2421	0.784	0.806	2.1	5.8	0.4	1.8
SEC SMELT,REFIN NONFER METAL	3341	0.155	0.165	6.2	27.6	0.1	0.8
SECURITY & COMMODITY BROKERS	6200	444.762	453.017	1.2	12.4	1.8	4.3
SECURITY BROKERS & DEALERS	6211	2625.06	2759.03	5	-2.5	1.7	4.6
SEMICONDUCTOR,RELATED DEVICE	3674	4286.22	4501.08	4.9	5.6	1.4	2.6
SHIP & BOAT BLDG & REPAIRING	3730	14.438	14.525	0.5	9.1	0.1	0.6
SHOE STORES	5661	363.505	375.643	3.3	5.9	2	5.6
SHORT-TERM BUS CREDIT, EX AG	6153	319.043	313.509	-1.8	8.6	3.8	6.2
SOAP,DETERGENT,TOILET PREPS	2840	14957.9	14843	-0.8	-6.4	14	27.1
SOCIAL SERVICES	8300	13.9	15.441	10.4	5.4	3.5	13.6
SPEC OUTPATIENT FACILITY,NEC	8093	35.356	50.541	37.1	28.6	10.8	22
SPECIAL CLEAN,POLISH PREPS	2842	1990.67	2069.19	3.2	1.7	10.3	19.9
SPECIAL INDUSTRY MACHINERY	3550	3.953	4.124	4.9	2.8	0.2	0.5
SPECIAL INDUSTRY MACHY, NEC	3559	351.264	390.054	10.5	7.5	1.2	2.5
SPORTING & ATHLETIC GDS, NEC	3949	165.571	178.394	7.5	6.9	7	16.9
SRCH,DET,NAV,GUID,AERO SYS	3812	1506.14	1560.96	3.4	-1.3	2.9	9.7
STEEL WORKS & BLAST FURNACES	3312	99.517	98.539	-3.7	-9.3	0.2	1.2
STEEL WRK, ROLL&FINISH MILL	3310	49.386	51.015	3.2	8.4	0.8	4.5
SUBDIVIDE, DEV, EX CEMETERY	6552	98.422	107.152	8.1	9.4	1.4	3.5
SUGAR & CONFECTIONERY PRODS	2060	735.614	802.881	7.9	-0.9	6.3	15.1
SURGICAL,MED INSTR,APPARATUS	3841	44.564	50.686	12.8	8.6	0.2	0.4
SVCS TO DWELLINGS, OTH BLDGS	7340	289.9	253.86	-13.1	-1.2	2	6.6
SWITCHGEAR & SWITCHBOARD APP	3613	2.3	2.657	11.8	-8.3	0.3	0.7
TELE & TELEGRAPH APPARATUS	3661	60.779	63.488	4.4	6.9	0.7	1.4
TELEVISION BROADCAST STATION	4833	1922.98	1979.15	1.4	1.6	6	10.4
TESTING LABORATORIES	8734	7.947	8.128	2.3	4.2	0.8	1.4

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2016 AD-TO-SALES RATIOS

<u>Industry Name</u>	<u>SIC Code</u>	<u>2015 Ad Spending</u> <u>(\$ Millions)</u>	<u>2016 Ad Spending</u> <u>(\$ Millions)</u>	<u>Annual Ad Growth</u> <u>Rate (%)</u>	<u>Annual Sales Growth</u> <u>Rate (%)</u>	<u>2016 Ad \$</u> <u>as %</u> <u>of Sales</u>	<u>2016 Ad \$</u> <u>as %</u> <u>of Margin</u>
TEXTILE MILL PRODUCTS	2200	5.037	5.488	8.6	-1.7	0.8	4.7
TIRES AND INNER TUBES	3011	438.038	419.556	-5.2	-9.3	2.4	7.1
TOBACCO PRODUCTS	2100	2.829	3.218	12.9	-1.6	1.7	3.2
TRANSPORTATION SERVICES	4700	3254.39	3802.04	15.8	15.3	27.9	41.6
TRUCK AND BUS BODIES	3713	0.079	0.078	-1.4	7.2	0	0.1
TRUCKING, EXCEPT LOCAL	4213	126.992	139.493	7.9	5.3	0.5	2.7
TRUCKING,COURIER SVC,EX AIR	4210	169.933	180.001	5.8	1.7	0.3	-5.4
VARIETY STORES	5331	5369.29	5454.28	1.6	1.1	0.8	3
VIDEO TAPE RENTAL	7841	714.3	818.141	14.1	16.4	10.3	12
WATCHES, CLOCKS AND PARTS	3873	317.458	346.721	8	1.1	8.8	15.8
WATER TRANSPORTATION	4400	1873.66	2013.72	7.3	2.6	4.2	10.1
WATER,SEWER,PIPELINE CONSTR	1623	6.51	6.827	7.4	-4.5	0	0.3
WINE,BRANDY & BRANDY SPIRITS	2084	656.566	772.354	16.3	9.7	8.3	16.5
WMNS,MISS,CHLD,INFNT UNDGRMT	2340	114.256	104.971	-8.5	-3.2	4.2	9.7
WOMEN'S CLOTHING STORES	5621	858.784	849.824	-0.9	2.1	3.3	7
WOMENS,MISSES,JRS OUTERWEAR	2330	4411	4306.8	-2.1	-2.5	10.8	16
WOOD HSHLD FURN, EX UPHOLSRD	2511	16.494	17.501	5.9	5.5	3.6	6
X-RAY & RELATED APPARATUS	3844	13.292	10.805	-20.9	4.6	0.4	0.6

2016 AD-TO-SALES RATIOS

NOTES:

Advertising Ratios & Budgets are based on data from government filings and published financial records. Three accounting measures are reviewed: Advertising Expenditures, Net Sales and Cost of Goods Sold.

SIC No. = Standard Industrial Classification Number as established by the U.S. Department of Commerce.

Ad Dollars as Percent of Sales = Advertising Expense Divided by Net Sales (after returns, allowances, discounts). For practical purposes, Net Sales can be thought of as the "Top Line" of the company's income statement.

The ratio shown is an estimate for the current year based on forecasting models. It can be thought of as the "most likely" advertising-to-sales ratio for the specified industry.

Ad Dollars as Percent of Margin - Advertising Expense Divided by Net Sales Minus Cost of Goods Sold. (Includes production, labor, materials, and appropriate overhead; does not include non-production expenses, taxes, interest, depreciation, amortization, selling, general, and administrative expenses. For Non-Manufacturing companies, cost of goods sold represent total operating costs.)

The ratio shown is an estimate for the current year based on forecasting models. It can be thought of as the "most likely" advertising-to-gross margin ratio for the specified industry.

Annual Ad Growth Rate (%) and Annual Sales Growth Rate (%): Two growth rates are reported for each industry. These growth rates are based on forecasted advertising spending and forecasted sales from the models applied to historical data. They are the average annual compound growth rate in advertising and in net sales expressed as a percentage, calculated over the current period, last year to next year.

In some instances, the growth rate of advertising and the growth rate of net sales will be the same. This event indicates that the Constant Ratio Model was mainly or entirely used to estimate advertising spending. Since this model uses forecasted sales to estimate advertising spending, the growth rates will be the same or similar.

In this report, a zero value such as 0 or 0.0 are "legitimate" numeric values which indicate that spending for the year was under \$1,000. N/A is used to indicate missing data (ad spending not published or released; or the forecasting models were not able to derive estimates).

In the industry summary tables, where figures are composites of data values for the set of all firms in the industry, the difference between N/A and "zero" is important. In calculating industry summary figures, N/A values are omitted from the calculations while "zero" values are included.

Source: Schonfeld & Associates - 2016 Advertising Ratios & Budgets