

BetaShares Portfolio Holdings

Fund Name: BETASHARES FTSE RAFI U.S. 1000 ETF

Fund ASX Code: QUS

Date: 21/12/2018

Security/Code	Security Name	Weighting	# securities	Market value
XOM	EXXON MOBIL CORP	2.61%	9,159	\$648,274.00
AAPL	APPLE INC	2.26%	3,484	\$560,541.00
BRK/B	BERKSHIRE HATHAWAY INC-CL B	2.06%	2,620	\$511,345.00
T	AT&T INC	1.98%	16,495	\$491,881.00
CVX	CHEVRON CORP	1.94%	4,474	\$482,431.00
JPM	JPMORGAN CHASE & CO	1.88%	4,804	\$467,381.00
VZ	VERIZON COMMUNICATIONS INC	1.74%	7,740	\$432,356.00
MSFT	MICROSOFT CORP	1.73%	4,154	\$430,728.00
JNJ	JOHNSON & JOHNSON	1.39%	2,699	\$344,419.00
WFC	WELLS FARGO & CO	1.36%	7,393	\$337,638.00
PFE	PFIZER INC	1.33%	7,864	\$330,052.00
PG	PROCTER & GAMBLE CO/THE	1.31%	3,540	\$324,830.00
BAC	BANK OF AMERICA CORP	1.17%	11,994	\$290,015.00
INTC	INTEL CORP	1.08%	5,910	\$269,319.00
WMT	WAL-MART STORES INC	1.07%	2,924	\$264,768.00
MRK	MERCK & CO. INC.	1.03%	3,470	\$255,982.00
C	CITIGROUP INC	1.02%	4,812	\$254,170.00
CSCO	CISCO SYSTEMS INC	0.82%	4,702	\$202,844.00
KO	COCA-COLA CO/THE	0.81%	4,190	\$200,701.00
UNH	UNITEDHEALTH GROUP INC	0.80%	797	\$199,497.00
CMCSA	COMCAST CORP-CLASS A	0.80%	5,626	\$197,979.00
GE	GENERAL ELECTRIC CO	0.75%	24,246	\$185,724.00
CVS	CVS HEALTH CORP	0.74%	2,675	\$183,478.00
IBM	INTL BUSINESS MACHINES CORP	0.71%	1,516	\$176,508.00
COP	CONOCOPHILLIPS	0.69%	2,814	\$172,442.00
PEP	PEPSICO INC	0.67%	1,524	\$167,701.00
DIS	WALT DISNEY CO/THE	0.64%	1,452	\$158,587.00
F	FORD MOTOR CO	0.63%	18,832	\$156,682.00
ESRX	EXPRESS SCRIPTS HOLDING CO	0.63%	1,629	\$156,058.00
PM	PHILIP MORRIS INTERNATIONAL	0.60%	2,059	\$148,330.00
GM	GENERAL MOTORS CO	0.58%	4,127	\$144,156.00
GOOGL	GOOGLE INC-CL A	0.58%	138	\$142,893.00
GOOG	GOOGLE INC-CL C	0.54%	132	\$135,037.00
MCD	MCDONALD'S CORP	0.53%	738	\$132,220.00
UTX	UNITED TECHNOLOGIES CORP	0.53%	1,151	\$130,984.00
HD	HOME DEPOT INC	0.53%	781	\$130,864.00
COST	COSTCO WHOLESALE CORP	0.53%	648	\$130,514.00
DUK	DUKE ENERGY CORP	0.51%	1,464	\$127,705.00
ORCL	ORACLE CORP	0.49%	2,609	\$121,188.00
BA	BOEING CO/THE	0.48%	372	\$118,873.00
EXC	EXELON CORP	0.47%	2,547	\$116,449.00
WBA	WALGREENS BOOTS ALLIANCE INC	0.46%	1,548	\$113,453.00
MDT	MEDTRONIC PLC	0.46%	1,243	\$113,436.00
GS	GOLDMAN SACHS GROUP INC	0.46%	668	\$113,059.00
LLY	ELI LILLY & CO	0.45%	1,021	\$111,401.00
AIG	AMERICAN INTERNATIONAL GROUP	0.43%	2,717	\$106,887.00
MO	ALTRIA GROUP INC	0.43%	2,073	\$106,552.00
ANTM	ANTHEM INC	0.43%	411	\$105,878.00
QCOM	QUALCOMM INC	0.42%	1,824	\$103,403.00
AMZN	AMAZON.COM INC	0.42%	69	\$103,161.00
MPC	MARATHON PETROLEUM CORP	0.40%	1,710	\$100,257.00
AMGN	AMGEN INC	0.40%	534	\$99,052.00
USB	US BANCORP	0.40%	2,127	\$98,310.00
PSX	PHILLIPS 66	0.39%	1,152	\$98,104.00
MET	METLIFE INC	0.39%	2,489	\$97,668.00
MCK	MCKESSON CORP	0.39%	877	\$97,023.00

UNP	UNION PACIFIC CORP	0.39%	707	\$96,781.00
AXP	AMERICAN EXPRESS CO	0.38%	966	\$95,412.00
PRU	PRUDENTIAL FINANCIAL INC	0.37%	1,151	\$92,771.00
TGT	TARGET CORP	0.37%	1,470	\$92,360.00
NEE	NEXTERA ENERGY INC	0.37%	523	\$91,274.00
SO	SOUTHERN CO/THE	0.36%	1,999	\$90,515.00
KR	KROGER CO	0.36%	3,186	\$89,941.00
HON	HONEYWELL INTERNATIONAL INC	0.36%	666	\$88,751.00
MDLZ	MONDELEZ INTERNATIONAL INC-A	0.36%	2,131	\$88,245.00
VLO	VALERO ENERGY CORP	0.36%	1,243	\$88,228.00
COF	CAPITAL ONE FINANCIAL CORP	0.35%	1,173	\$87,588.00
OXY	OCCIDENTAL PETROLEUM CORP	0.35%	1,404	\$87,385.00
MMM	3M CO	0.35%	457	\$86,812.00
CAT	CATERPILLAR INC	0.35%	706	\$86,365.00
DWDP	DOWDUPONT INC	0.33%	1,586	\$82,726.00
PNC	PNC FINANCIAL SERVICES GROUP	0.33%	719	\$81,988.00
UPS	UNITED PARCEL SERVICE-CL B	0.33%	864	\$81,492.00
ACN	ACCENTURE PLC-CL A	0.32%	528	\$79,707.00
SLB	SCHLUMBERGER LTD	0.31%	2,066	\$78,074.00
ADM	ARCHER-DANIELS-MIDLAND CO	0.31%	1,829	\$77,550.00
ABBV	ABBVIE INC	0.31%	924	\$77,172.00
ABT	ABBOTT LABORATORIES	0.31%	1,112	\$76,728.00
TRV	TRAVELERS COS INC/THE	0.31%	638	\$76,024.00
DE	DEERE & CO	0.30%	512	\$74,793.00
AGN	ALLERGAN PLC	0.29%	532	\$72,650.00
BMY	BRISTOL-MYERS SQUIBB CO	0.29%	1,436	\$72,360.00
MS	MORGAN STANLEY	0.29%	1,840	\$72,312.00
LOW	LOWE'S COS INC	0.29%	800	\$72,264.00
FB	FACEBOOK INC-A	0.29%	540	\$71,950.00
AEP	AMERICAN ELECTRIC POWER	0.28%	920	\$70,711.00
CB	CHUBB LTD	0.28%	543	\$68,771.00
GILD	GILEAD SCIENCES INC	0.27%	1,060	\$68,052.00
CAH	CARDINAL HEALTH INC	0.27%	1,453	\$67,027.00
V	VISA INC-CLASS A SHARES	0.26%	487	\$63,924.00
KMI	KINDER MORGAN INC	0.26%	4,074	\$63,432.00
TXN	TEXAS INSTRUMENTS INC	0.25%	690	\$62,466.00
LYB	LYONDELLBASELL INDU-CL A	0.25%	757	\$61,060.00
LMT	LOCKHEED MARTIN CORP	0.24%	221	\$60,545.00
D	DOMINION RESOURCES INC/VA	0.24%	816	\$60,474.00
TMO	THERMO FISHER SCIENTIFIC INC	0.24%	264	\$60,287.00
BK	BANK OF NEW YORK MELLON CORP	0.24%	1,320	\$60,060.00
ALL	ALLSTATE CORP	0.24%	727	\$58,872.00
AFL	AFLAC INC	0.24%	1,337	\$58,801.00
FOXA	TWENTY-FIRST CENTURY FOX-A	0.24%	1,207	\$58,564.00
CTL	CENTURYLINK INC	0.23%	3,598	\$57,856.00
PEG	PUBLIC SERVICE ENTERPRISE GP	0.23%	1,074	\$56,664.00
HCA	HCA HOLDINGS INC	0.22%	453	\$55,379.00
CME	CME GROUP INC	0.22%	297	\$55,102.00
RTN	RAYTHEON COMPANY	0.22%	337	\$54,705.00
HPE	HEWLETT PACKARD ENTERPRIS-WI	0.22%	4,097	\$53,957.00
DHR	DANAHER CORP	0.21%	528	\$53,143.00
ABC	AMERISOURCEBERGEN CORP	0.21%	690	\$52,654.00
TJX	TJX COMPANIES INC	0.21%	1,202	\$52,455.00
LIN	LINDE PLC	0.21%	336	\$52,359.00
NOC	NORTHROP GRUMMAN CORP	0.21%	205	\$51,937.00
BBT	BB&T CORP	0.21%	1,197	\$51,830.00
BLK	BLACKROCK INC	0.21%	138	\$51,362.00
NKE	NIKE INC -CL B	0.21%	744	\$51,314.00
HPQ	HEWLETT-PACKARD CO	0.20%	2,441	\$50,163.00
HUM	HUMANA INC	0.20%	177	\$50,142.00
CL	COLGATE-PALMOLIVE CO	0.19%	776	\$48,019.00
KMB	KIMBERLY-CLARK CORP	0.19%	420	\$47,830.00

SBUX	STARBUCKS CORP	0.19%	744	\$47,661.00
GD	GENERAL DYNAMICS CORP	0.19%	299	\$47,538.00
M	MACY'S INC	0.19%	1,563	\$47,531.00
SY	SYSCO CORP	0.19%	745	\$47,300.00
EMR	EMERSON ELECTRIC CO	0.19%	813	\$46,894.00
MMC	MARSH & MCLENNAN COS	0.19%	582	\$46,671.00
CSX	CSX CORP	0.18%	732	\$45,421.00
FE	FIRSTENERGY CORP	0.18%	1,208	\$45,131.00
FDX	FEDEX CORP	0.18%	275	\$44,690.00
CI	CIGNA CORP	0.18%	229	\$44,266.00
PGR	PROGRESSIVE CORP	0.18%	724	\$44,070.00
NSC	NORFOLK SOUTHERN CORP	0.18%	298	\$43,785.00
ETR	ENTERGY CORP	0.17%	498	\$43,246.00
HIG	HARTFORD FINANCIAL SVCS GRP	0.17%	1,010	\$43,097.00
ITW	ILLINOIS TOOL WORKS	0.17%	342	\$42,959.00
WM	WASTE MANAGEMENT INC	0.17%	484	\$42,553.00
ETN	EATON CORP PLC	0.17%	625	\$42,506.00
ED	CONSOLIDATED EDISON INC	0.17%	524	\$41,972.00
FIS	FIDELITY NATIONAL INFORMATIO	0.17%	413	\$41,730.00
GLW	CORNING INC	0.17%	1,386	\$41,663.00
KSS	KOHL'S CORP	0.16%	660	\$40,696.00
PCAR	PACCAR INC	0.16%	738	\$40,501.00
VTR	VENTAS INC	0.16%	656	\$40,285.00
SPG	SIMON PROPERTY GROUP INC	0.16%	234	\$40,236.00
BIIB	BIOGEN INC	0.16%	137	\$40,099.00
SRE	SEMPRA ENERGY	0.16%	348	\$39,651.00
ARW	ARROW ELECTRONICS INC	0.16%	576	\$39,594.00
SYF	SYNCHRONY FINANCIAL	0.16%	1,699	\$39,417.00
HFC	HOLLYFRONTIER CORP	0.16%	765	\$39,413.00
WELL	WELLTOWER INC	0.16%	544	\$38,689.00
BG	BUNGE LTD	0.15%	679	\$38,411.00
HES	HESS CORP	0.15%	828	\$38,088.00
AMT	AMERICAN TOWER CORP	0.15%	234	\$38,034.00
ECL	ECOLAB INC	0.15%	258	\$38,034.00
MU	MICRON TECHNOLOGY INC	0.15%	1,202	\$37,755.00
L	LOEWS CORP	0.15%	840	\$37,699.00
CCL	CARNIVAL CORP	0.15%	681	\$37,462.00
CCI	CROWN CASTLE INTL CORP	0.15%	336	\$37,047.00
CMI	CUMMINS INC	0.15%	282	\$36,911.00
MTB	M & T BANK CORP	0.15%	258	\$36,520.00
APD	AIR PRODUCTS & CHEMICALS INC	0.15%	234	\$36,059.00
AES	AES CORP	0.14%	2,439	\$35,951.00
MA	MASTERCARD INC-CLASS A	0.14%	191	\$35,740.00
NUE	NUCOR CORP	0.14%	666	\$35,711.00
ADP	AUTOMATIC DATA PROCESSING	0.14%	273	\$35,580.00
OMC	OMNICOM GROUP	0.14%	480	\$35,458.00
CHTR	CHARTER COMMUNICATION-A	0.14%	119	\$35,414.00
BDX	BECTON DICKINSON AND CO	0.14%	158	\$35,114.00
APC	ANADARKO PETROLEUM CORP	0.14%	743	\$34,765.00
PPL	PPL CORP	0.14%	1,230	\$34,723.00
AON	AON PLC	0.14%	234	\$34,705.00
IP	INTERNATIONAL PAPER CO	0.14%	852	\$34,591.00
TSN	TYSON FOODS INC-CL A	0.14%	648	\$34,130.00
PYPL	PAYPAL HOLDINGS INC	0.14%	406	\$34,116.00
KHC	KRAFT HEINZ CO/THE	0.14%	752	\$33,908.00
IR	INGERSOLL-RAND PLC	0.14%	366	\$33,888.00
DTE	DTE ENERGY COMPANY	0.14%	296	\$33,688.00
GIS	GENERAL MILLS INC	0.13%	864	\$33,307.00
CFG	CITIZENS FINANCIAL GROUP	0.13%	1,148	\$33,292.00
ES	EVERSOURCE ENERGY	0.13%	491	\$33,039.00
AEE	AMEREN CORPORATION	0.13%	487	\$32,731.00
FCX	FREEMPORT-MCMORAN INC	0.13%	3,198	\$32,556.00

STI	SUNTRUST BANKS INC	0.13%	659	\$32,555.00
SYK	STRYKER CORP	0.13%	206	\$32,548.00
TEL	TE CONNECTIVITY LTD	0.13%	449	\$32,454.00
PLD	PROLOGIS INC	0.13%	526	\$32,218.00
JCI	JOHNSON CONTROLS INC	0.13%	1,037	\$31,971.00
MRO	MARATHON OIL CORP	0.13%	2,299	\$31,864.00
STT	STATE STREET CORP	0.13%	527	\$31,557.00
BKNG	PRICELINE GROUP INC/THE	0.13%	18	\$31,259.00
BLL	BALL CORP	0.12%	672	\$30,825.00
CNC	CENTENE CORP	0.12%	259	\$30,800.00
RF	REGIONS FINANCIAL CORP	0.12%	2,366	\$30,379.00
NOV	NATIONAL OILWELL VARCO INC	0.12%	1,154	\$30,246.00
HAL	HALLIBURTON CO	0.12%	1,092	\$30,183.00
ALLY	ALLY FINANCIAL INC	0.12%	1,332	\$30,090.00
FITB	FIFTH THIRD BANCORP	0.12%	1,319	\$30,073.00
EIX	EDISON INTERNATIONAL	0.12%	512	\$29,911.00
MOS	MOSAIC CO/THE	0.12%	1,011	\$29,905.00
PFG	PRINCIPAL FINANCIAL GROUP	0.12%	690	\$29,849.00
DFS	DISCOVER FINANCIAL SERVICES	0.12%	510	\$29,784.00
EOG	EOG RESOURCES INC	0.12%	320	\$29,754.00
AVT	AVNET INC	0.12%	817	\$29,673.00
RSG	REPUBLIC SERVICES INC	0.12%	401	\$29,157.00
EQR	EQUITY RESIDENTIAL	0.12%	426	\$29,066.00
VIAB	VIACOM INC-CLASS B	0.12%	1,078	\$28,826.00
WEC	WISCONSIN ENERGY CORP	0.12%	401	\$28,595.00
PSA	PUBLIC STORAGE	0.11%	139	\$28,252.00
CNP	CENTERPOINT ENERGY INC	0.11%	990	\$28,106.00
VST	VISTRA ENERGY CORP	0.11%	1,205	\$27,908.00
EVRG	EVERGY INC	0.11%	478	\$27,762.00
TROW	T ROWE PRICE GROUP INC	0.11%	312	\$27,584.00
HCP	HCP INC	0.11%	972	\$27,546.00
PCG	P G & E CORP	0.11%	1,156	\$27,455.00
AMAT	APPLIED MATERIALS INC	0.11%	863	\$27,210.00
AVB	AVALONBAY COMMUNITIES INC	0.11%	150	\$27,117.00
STX	SEAGATE TECHNOLOGY	0.11%	749	\$27,099.00
NEM	NEWMONT MINING CORP	0.11%	843	\$27,052.00
ICE	INTERCONTINENTAL EXCHANGE INC	0.11%	360	\$27,029.00
MGM	MGM RESORTS INTERNATIONAL	0.11%	1,098	\$26,912.00
MUSA	MURPHY USA INC	0.11%	366	\$26,879.00
K	KELLOGG CO	0.11%	456	\$26,763.00
KLAC	KLA-TENCOR CORP	0.11%	307	\$26,691.00
WMB	WILLIAMS COS INC	0.11%	1,194	\$26,650.00
PNW	PINNACLE WEST CAPITAL	0.11%	300	\$26,535.00
BAX	BAXTER INTERNATIONAL INC	0.11%	414	\$26,517.00
PPG	PPG INDUSTRIES INC	0.11%	271	\$26,133.00
DLR	DIGITAL REALTY TRUST INC	0.10%	240	\$26,042.00
DG	DOLLAR GENERAL CORP	0.10%	252	\$25,961.00
NI	NISOURCE INC	0.10%	984	\$25,948.00
DGX	QUEST DIAGNOSTICS INC	0.10%	307	\$25,813.00
ISRG	INTUITIVE SURGICAL INC	0.10%	54	\$25,484.00
LBTYK	LIBERTY GLOBAL PLC-SERIES C	0.10%	1,194	\$25,456.00
DAL	DELTA AIR LINES INC	0.10%	487	\$25,290.00
CBS	CBS CORP-CLASS B NON VOTING	0.10%	557	\$25,271.00
O	REALTY INCOME CORP	0.10%	390	\$25,202.00
BBY	BEST BUY CO INC	0.10%	493	\$25,123.00
VFC	VF CORP	0.10%	348	\$25,000.00
CMS	CMS ENERGY CORP	0.10%	483	\$24,691.00
SCHW	SCHWAB (CHARLES) CORP	0.10%	618	\$24,547.00
ATO	ATMOS ENERGY CORP	0.10%	258	\$24,492.00
NRG	NRG ENERGY INC	0.10%	607	\$24,329.00
GNW	GENWORTH FINANCIAL INC-CL A	0.10%	5,691	\$24,244.00
UDR	UDR INC	0.10%	588	\$24,226.00

PH	PARKER HANNIFIN CORP	0.10%	162	\$23,918.00
DXC	DXC TECHNOLOGY CO	0.10%	437	\$23,629.00
VOYA	VOYA FINANCIAL INC	0.09%	600	\$23,556.00
LB	L BRANDS INC	0.09%	851	\$23,173.00
SPGI	S&P GLOBAL INC	0.09%	138	\$23,047.00
ESS	ESSEX PROPERTY TRUST INC	0.09%	90	\$23,004.00
NLY	ANNALY CAPITAL MANAGEMENT IN	0.09%	2,259	\$22,816.00
EBAY	EBAY INC	0.09%	804	\$22,753.00
GPS	GAP INC/THE	0.09%	900	\$22,653.00
APA	APACHE CORP	0.09%	781	\$22,454.00
SYMC	SYMANTEC CORP	0.09%	1,098	\$22,432.00
AGO	ASSURED GUARANTY LTD	0.09%	600	\$22,260.00
RIG	TRANSOCEAN LTD	0.09%	3,198	\$22,258.00
FLR	FLUOR CORP	0.09%	690	\$22,039.00
ADI	ANALOG DEVICES INC	0.09%	263	\$22,010.00
GT	GOODYEAR TIRE & RUBBER CO	0.09%	1,068	\$21,809.00
WHR	WHIRLPOOL CORP	0.09%	198	\$21,804.00
BEN	FRANKLIN RESOURCES INC	0.09%	738	\$21,468.00
DVA	DAVITA HEALTHCARE PARTNERS I	0.09%	402	\$21,459.00
LNC	LINCOLN NATIONAL CORP	0.09%	413	\$21,311.00
BXP	BOSTON PROPERTIES INC	0.09%	180	\$21,244.00
SCG	SCANA CORP	0.08%	424	\$20,823.00
CHD	CHURCH & DWIGHT CO INC	0.08%	321	\$20,788.00
ADBE	ADOBE SYSTEMS INC	0.08%	92	\$20,668.00
AVGO	BROADCOM LTD	0.08%	84	\$20,487.00
QRTEA	LIBERTY INTERACTIVE CORP-A	0.08%	1,050	\$20,475.00
GPC	GENUINE PARTS CO	0.08%	215	\$20,380.00
UAL	UNITED CONTINENTAL HOLDINGS	0.08%	235	\$20,297.00
RNR	RENAISSANCERE HOLDINGS LTD	0.08%	152	\$20,257.00
NTRS	NORTHERN TRUST CORP	0.08%	247	\$20,254.00
TMUS	T-MOBILE US INC	0.08%	312	\$20,239.00
HLF	HERBALIFE LTD	0.08%	348	\$20,080.00
AZO	AUTOZONE INC	0.08%	24	\$20,061.00
HST	HOST HOTELS & RESORTS INC	0.08%	1,164	\$20,044.00
LVS	LAS VEGAS SANDS CORP	0.08%	390	\$19,976.00
ACM	AECOM TECHNOLOGY CORP	0.08%	750	\$19,965.00
OC	OWENS CORNING	0.08%	450	\$19,836.00
HSY	HERSHEY CO/THE	0.08%	180	\$19,319.00
SWK	STANLEY BLACK & DECKER INC	0.08%	162	\$19,025.00
MYL	MYLAN NV	0.08%	683	\$18,933.00
HSIC	HENRY SCHEIN INC	0.08%	241	\$18,899.00
OI	OWENS-ILLINOIS INC	0.08%	1,146	\$18,898.00
TDS	TELEPHONE AND DATA SYSTEMS	0.08%	569	\$18,879.00
JWN	NORDSTROM INC	0.08%	399	\$18,673.00
MUR	MURPHY OIL CORP	0.07%	725	\$18,582.00
AJG	ARTHUR J GALLAGHER & CO	0.07%	253	\$18,550.00
CTSH	COGNIZANT TECH SOLUTIONS-A	0.07%	288	\$18,498.00
BSX	BOSTON SCIENTIFIC CORP	0.07%	542	\$18,417.00
RCL	ROYAL CARIBBEAN CRUISES LTD	0.07%	180	\$18,351.00
MSI	MOTOROLA SOLUTIONS INC	0.07%	154	\$18,334.00
SHW	SHERWIN-WILLIAMS CO/THE	0.07%	48	\$18,252.00
ATVI	ACTIVISION BLIZZARD INC	0.07%	393	\$18,208.00
NFG	NATIONAL FUEL GAS CO	0.07%	336	\$18,184.00
AMTD	TD AMERITRADE HOLDING CORP	0.07%	383	\$18,154.00
ETFC	E*TRADE FINANCIAL CORP	0.07%	421	\$18,145.00
SLG	SL GREEN REALTY CORP	0.07%	216	\$18,135.00
WCG	WELLCARE HEALTH PLANS INC	0.07%	79	\$18,075.00
SCI	SERVICE CORP INTERNATIONAL	0.07%	432	\$17,980.00
ARNC	ARCONIC INC	0.07%	1,002	\$17,956.00
TPR	TAPESTRY INC	0.07%	528	\$17,926.00
FL	FOOT LOCKER INC	0.07%	378	\$17,910.00
CTXS	CITRIX SYSTEMS INC	0.07%	168	\$17,801.00

LNT	ALLIANT ENERGY CORP	0.07%	407	\$17,794.00
TECD	TECH DATA CORP	0.07%	216	\$17,714.00
WY	WEYERHAEUSER CO	0.07%	758	\$17,586.00
FTV	FORTIVE CORP	0.07%	264	\$17,577.00
TXT	TEXTRON INC	0.07%	372	\$17,558.00
WCC	WESCO INTERNATIONAL INC	0.07%	372	\$17,484.00
NTAP	NETAPP INC	0.07%	294	\$17,455.00
IVZ	INVESCO LTD	0.07%	1,062	\$17,438.00
AME	AMETEK INC	0.07%	256	\$17,382.00
CHRW	C.H. ROBINSON WORLDWIDE INC	0.07%	206	\$17,279.00
VNO	VORNADO REALTY TRUST	0.07%	264	\$17,036.00
EMN	EASTMAN CHEMICAL CO	0.07%	240	\$16,942.00
STWD	STARWOOD PROPERTY TRUST INC REIT 0.0	0.07%	799	\$16,923.00
CRM	SALESFORCE.COM INC	0.07%	128	\$16,788.00
AMP	AMERIPRISE FINANCIAL INC	0.07%	159	\$16,770.00
ILMN	ILLUMINA INC	0.07%	55	\$16,687.00
ORLY	O'REILLY AUTOMOTIVE INC	0.07%	49	\$16,679.00
PNR	PENTAIR PLC	0.07%	437	\$16,676.00
KEY	KEYCORP	0.07%	1,156	\$16,646.00
AWK	AMERICAN WATER WORKS CO INC	0.07%	179	\$16,574.00
BAH	BOOZ ALLEN HAMILTON HOLDINGS	0.07%	351	\$16,571.00
SUI	SUN COMMUNITIES INC REIT 0.0	0.07%	160	\$16,557.00
JEC	JACOBS ENGINEERING GROUP INC	0.07%	288	\$16,546.00
HAS	HASBRO INC	0.07%	205	\$16,503.00
IRM	IRON MOUNTAIN INC	0.07%	496	\$16,502.00
GRMN	GARMIN LTD	0.07%	265	\$16,478.00
MAA	MID-AMERICA APARTMENT COMM REIT 0.0	0.07%	168	\$16,471.00
EL	ESTEE LAUDER COMPANIES-CL A	0.07%	128	\$16,453.00
ROP	ROPER TECHNOLOGIES INC	0.07%	61	\$16,438.00
CF	CF INDUSTRIES HOLDINGS INC	0.07%	390	\$16,349.00
AGNC	AMERICAN CAPITAL AGENCY CORP REIT 0.0	0.07%	918	\$16,249.00
VVC	VECTREN CORP	0.07%	226	\$16,225.00
VAR	VARIAN MEDICAL SYSTEMS INC	0.07%	142	\$16,177.00
SNPS	SYNOPSIS INC	0.07%	192	\$16,151.00
CELG	CELGENE CORP	0.06%	246	\$16,133.00
FRT	FEDERAL REALTY INVS TRUST REIT 0.0	0.06%	131	\$16,106.00
AAP	ADVANCE AUTO PARTS INC	0.06%	103	\$16,080.00
MAR	MARRIOTT INTERNATIONAL -CL A	0.06%	151	\$16,065.00
APTIV	APTIV PLC	0.06%	258	\$15,996.00
FCN	FTI CONSULTING INC	0.06%	264	\$15,996.00
CAG	CONAGRA FOODS INC	0.06%	546	\$15,883.00
KEYS	KEYSIGHT TECHNOLOGIES IN	0.06%	264	\$15,858.00
HII	HUNTINGTON INGALLS INDUSTRIE	0.06%	84	\$15,855.00
DRI	DARDEN RESTAURANTS INC	0.06%	157	\$15,799.00
CREE	CREE INC	0.06%	365	\$15,691.00
CPB	CAMPBELL SOUP CO	0.06%	403	\$15,576.00
A	AGILENT TECHNOLOGIES INC	0.06%	232	\$15,505.00
LEA	LEAR CORP	0.06%	128	\$15,498.00
ROST	ROSS STORES INC	0.06%	197	\$15,459.00
MHK	MOHAWK INDUSTRIES INC	0.06%	132	\$15,440.00
OKE	ONEOK INC	0.06%	276	\$15,426.00
STLD	STEEL DYNAMICS INC	0.06%	498	\$15,423.00
CASY	CASEY'S GENERAL STORES INC	0.06%	120	\$15,388.00
NWL	NEWELL BRANDS INC	0.06%	754	\$15,382.00
ALB	ALBEMARLE CORP	0.06%	191	\$15,242.00
DLTR	DOLLAR TREE INC	0.06%	176	\$15,176.00
CUBE	CUBESMART REIT 0.0	0.06%	503	\$15,160.00
PAYX	PAYCHEX INC	0.06%	233	\$15,089.00
BRX	BRIXMOR PROPERTY GROUP INC REIT 0.0	0.06%	1,001	\$15,085.00
BKH	BLACK HILLS CORP	0.06%	234	\$15,025.00
HOG	HARLEY-DAVIDSON INC	0.06%	450	\$14,963.00
BF/B	BROWN-FORMAN CORP-CLASS B	0.06%	327	\$14,911.00

CLX	CLOROX COMPANY	0.06%	96	\$14,866.00
EQC	EQUITY COMMONWEALTH REIT 0.0	0.06%	491	\$14,838.00
FSLR	FIRST SOLAR INC	0.06%	348	\$14,703.00
UNM	UNUM GROUP	0.06%	510	\$14,693.00
FANG	DIAMONDBACK ENERGY INC	0.06%	162	\$14,677.00
XRAY	DENTSPLY INTERNATIONAL INC	0.06%	408	\$14,672.00
EW	EDWARDS LIFESCIENCES CORP	0.06%	95	\$14,597.00
NLSN	NIELSEN HOLDINGS PLC	0.06%	600	\$14,580.00
NCR	NCR CORPORATION	0.06%	609	\$14,470.00
FOX	TWENTY-FIRST CENTURY FOX - B	0.06%	300	\$14,457.00
STZ	CONSTELLATION BRANDS INC-A	0.06%	84	\$14,456.00
BPOP	POPULAR INC	0.06%	312	\$14,424.00
BHGE	BAKER HUGHES A GE CO	0.06%	684	\$14,391.00
SEE	SEALED AIR CORP	0.06%	414	\$14,353.00
OHI	OMEGA HEALTHCARE INVESTORS REIT 0.0	0.06%	401	\$14,296.00
WAT	WATERS CORP	0.06%	78	\$14,220.00
ESV	ENSCO PLC-CL A	0.06%	3,847	\$14,157.00
TAP	MOLSON COORS BREWING CO -B	0.06%	245	\$14,154.00
TDG	TRANSDIGM GROUP INC	0.06%	42	\$14,001.00
SJM	JM SMUCKER CO/THE	0.06%	144	\$13,954.00
UHS	UNIVERSAL HEALTH SERVICES-B	0.06%	120	\$13,927.00
SRC	SPIRIT REALTY CAPITAL INC REIT 0.0	0.06%	383	\$13,903.00
OGE	OGE ENERGY CORP	0.06%	348	\$13,861.00
THC	TENET HEALTHCARE CORP	0.06%	719	\$13,848.00
HTZ	HERTZ GLOBAL HOLDINGS INC	0.06%	929	\$13,805.00
WDC	WESTERN DIGITAL CORP	0.06%	377	\$13,791.00
ALXN	ALEXION PHARMACEUTICALS INC	0.06%	134	\$13,773.00
AER	AERCAP HOLDINGS NV	0.06%	308	\$13,768.00
HRB	H&R BLOCK INC	0.06%	546	\$13,705.00
DHI	DR HORTON INC	0.05%	383	\$13,650.00
G	GENPACT LTD	0.05%	500	\$13,650.00
FMC	FMC CORP	0.05%	182	\$13,625.00
BWA	BORGWARNER INC	0.05%	401	\$13,594.00
MXIM	MAXIM INTEGRATED PRODUCTS	0.05%	274	\$13,527.00
DVN	DEVON ENERGY CORP	0.05%	567	\$13,523.00
JBL	JABIL CIRCUIT INC	0.05%	564	\$13,395.00
LUV	SOUTHWEST AIRLINES CO	0.05%	274	\$13,366.00
FLS	FLOWSERVE CORP	0.05%	342	\$13,359.00
CTB	COOPER TIRE & RUBBER	0.05%	426	\$13,325.00
MCO	MOODY'S CORP	0.05%	95	\$13,253.00
WTR	AQUA AMERICA INC	0.05%	384	\$13,187.00
OSK	OSHKOSH CORP	0.05%	212	\$13,161.00
MAT	MATTEL INC	0.05%	1,278	\$13,125.00
FISV	FISERV INC	0.05%	180	\$13,111.00
HOLX	HOLOGIC INC	0.05%	330	\$13,094.00
COG	CABOT OIL & GAS CORP	0.05%	577	\$13,017.00
ROK	ROCKWELL AUTOMATION INC	0.05%	86	\$13,006.00
HRL	HORMEL FOODS CORP	0.05%	302	\$12,989.00
USFD	US FOODS HOLDING CORP	0.05%	411	\$12,979.00
RS	RELIANCE STEEL & ALUMINUM	0.05%	180	\$12,978.00
PB	PROSPERITY BANCSHARES INC	0.05%	218	\$12,943.00
PHM	PULTEGROUP INC	0.05%	501	\$12,926.00
IPG	INTERPUBLIC GROUP OF COS INC	0.05%	605	\$12,899.00
KORS	MICHAEL KORS HOLDINGS LTD	0.05%	339	\$12,855.00
MNK	MALLINCKRODT PLC	0.05%	722	\$12,801.00
LSXMK	LIBERTY SIRIUS GROUP-C	0.05%	341	\$12,781.00
FLEX	FLEXTRONICS INTL LTD	0.05%	1,708	\$12,759.00
NWSA	NEWS CORP - CLASS A	0.05%	1,076	\$12,740.00
SWKS	SKYWORKS SOLUTIONS INC	0.05%	191	\$12,675.00
URI	UNITED RENTALS INC	0.05%	125	\$12,613.00
DOX	AMDOCS LTD	0.05%	215	\$12,608.00
APLE	APPLE HOSPITALITY REIT INC REIT 0.0	0.05%	858	\$12,587.00

CFR	CULLEN/FROST BANKERS INC	0.05%	144	\$12,547.00
SANM	SANMINA CORP	0.05%	522	\$12,429.00
MAN	MANPOWERGROUP INC	0.05%	186	\$12,382.00
FRC	FIRST REPUBLIC BANK/CA	0.05%	148	\$12,312.00
SLM	SLM CORP	0.05%	1,512	\$12,293.00
KMX	CARMAX INC	0.05%	212	\$12,249.00
UGI	UGI CORP	0.05%	221	\$12,230.00
CBRE	CBRE GROUP INC - A	0.05%	302	\$12,222.00
CE	CELANESE CORP-SERIES A	0.05%	144	\$12,207.00
CPT	CAMDEN PROPERTY TRUST REIT 0.0	0.05%	134	\$12,028.00
LEG	LEGGETT & PLATT INC	0.05%	335	\$12,006.00
CHKP	CHECK POINT SOFTWARE TECH	0.05%	115	\$12,001.00
DOV	DOVER CORP	0.05%	167	\$11,974.00
PBF	PBF ENERGY INC-CLASS A	0.05%	366	\$11,891.00
MAS	MASCO CORP	0.05%	402	\$11,750.00
NBL	NOBLE ENERGY INC	0.05%	581	\$11,661.00
HBAN	HUNTINGTON BANCSHARES INC	0.05%	1,009	\$11,604.00
EXR	EXTRA SPACE STORAGE INC REIT 0.0	0.05%	123	\$11,535.00
MRVL	MARVELL TECHNOLOGY GROUP LTD	0.05%	781	\$11,528.00
RHI	ROBERT HALF INTL INC	0.05%	203	\$11,441.00
AVP	AVON PRODUCTS INC	0.05%	6,805	\$11,432.00
DRE	DUKE REALTY CORP	0.05%	420	\$11,374.00
HWC	HANCOCK WHITNEY CORP	0.05%	331	\$11,284.00
CXW	CORECIVIC INC REIT 0.0	0.05%	600	\$11,262.00
CIT	CIT GROUP INC	0.04%	288	\$11,123.00
MCHP	MICROCHIP TECHNOLOGY INC	0.04%	162	\$11,115.00
ARMK	ARAMARK	0.04%	373	\$11,100.00
PVH	PVH CORP	0.04%	121	\$11,068.00
AN	AUTONATION INC	0.04%	324	\$11,029.00
EWBC	EAST WEST BANCORP INC	0.04%	258	\$10,955.00
TRN	TRINITY INDUSTRIES INC	0.04%	533	\$10,927.00
LW	LAMB WESTON HOLDING INC-W/I	0.04%	145	\$10,874.00
REGN	REGENERON PHARMACEUTICALS	0.04%	30	\$10,821.00
LH	LABORATORY CRP OF AMER HLDGS	0.04%	84	\$10,786.00
LBTYA	LIBERTY GLOBAL PLC-A	0.04%	487	\$10,758.00
TMK	TORCHMARK CORP	0.04%	144	\$10,719.00
RL	RALPH LAUREN CORP	0.04%	106	\$10,711.00
EA	ELECTRONIC ARTS INC	0.04%	136	\$10,657.00
WRK	WESTROCK CO	0.04%	270	\$10,627.00
HDS	HD SUPPLY HOLDINGS INC	0.04%	287	\$10,616.00
QRVO	QORVO INC	0.04%	178	\$10,616.00
ACGL	ARCH CAPITAL GROUP LTD	0.04%	399	\$10,538.00
LDOS	LEIDOS HOLDINGS INC	0.04%	191	\$10,408.00
PRGO	PERRIGO CO PLC	0.04%	192	\$10,318.00
ADNT	ADIANT PLC	0.04%	589	\$10,290.00
RYN	RAYONIER INC	0.04%	361	\$10,289.00
PWR	QUANTA SERVICES INC	0.04%	360	\$10,278.00
SNH	SENIOR HOUSING PROP TRUST	0.04%	846	\$10,254.00
CMG	CHIPOTLE MEXICAN GRILL INC	0.04%	24	\$10,249.00
CLI	MACK-CALI REALTY CORP REIT 0.0	0.04%	516	\$10,248.00
NUAN	NUANCE COMMUNICATIONS INC	0.04%	720	\$10,138.00
EME	EMCOR GROUP INC	0.04%	165	\$10,133.00
MKL	MARKEL CORP	0.04%	10	\$10,100.00
JEF	JEFFERIES FINANCIAL GROUP INC	0.04%	579	\$10,080.00
SAIC	SCIENCE APPLICATIONS INTE	0.04%	156	\$10,032.00
ACC	AMERICAN CAMPUS COMMUNITIES REIT 0.0	0.04%	234	\$9,985.00
CXO	CONCHO RESOURCES INC	0.04%	95	\$9,954.00
SNX	SYNNEX CORP	0.04%	125	\$9,941.00
PKG	PACKAGING CORP OF AMERICA	0.04%	114	\$9,771.00
NVR	NVR INC	0.04%	4	\$9,766.00
VER	VEREIT INC REIT 0.0	0.04%	1,300	\$9,737.00
RLGY	REALOGY HOLDINGS CORP	0.04%	600	\$9,720.00

PXD	PIONEER NATURAL RESOURCES CO	0.04%	73	\$9,678.00
X	UNITED STATES STEEL CORP	0.04%	514	\$9,673.00
RAD	RITE AID CORP	0.04%	11,916	\$9,664.00
SNV	SYNOVUS FINANCIAL CORP	0.04%	312	\$9,588.00
NXPI	NXP SEMICONDUCTORS NV	0.04%	132	\$9,413.00
CAR	AVIS BUDGET GROUP INC	0.04%	378	\$9,333.00
GEO	GEO GROUP INC/THE REIT 0.0	0.04%	447	\$9,266.00
AA	ALCOA INC	0.04%	335	\$9,249.00
LPT	LIBERTY PROPERTY TRUST REIT 0.0	0.04%	210	\$9,244.00
FAF	FIRST AMERICAN FINANCIAL	0.04%	210	\$9,242.00
NVT	NVENT ELECTRIC PLC	0.04%	437	\$9,146.00
CMA	COMERICA INC	0.04%	136	\$9,136.00
HPT	HOSPITALITY PROPERTIES TRUST	0.04%	365	\$9,012.00
TIF	TIFFANY & CO	0.04%	115	\$8,944.00
MAC	MACERICH CO/THE	0.04%	209	\$8,941.00
ADS	ALLIANCE DATA SYSTEMS CORP	0.04%	56	\$8,890.00
NFLX	NETFLIX INC	0.04%	33	\$8,803.00
AWI	ARMSTRONG WORLD INDUSTRIES	0.03%	144	\$8,607.00
HP	HELMERICH & PAYNE	0.03%	169	\$8,580.00
ENDP	ENDO INTERNATIONAL PLC	0.03%	960	\$8,371.00
TEN	TENNECO INC	0.03%	300	\$8,325.00
MBI	MBIA INC	0.03%	961	\$8,197.00
AEO	AMERICAN EAGLE OUTFITTERS	0.03%	451	\$8,168.00
AAL	AMERICAN AIRLINES GROUP INC	0.03%	246	\$7,975.00
CC	CHEMOURS CO/THE	0.03%	294	\$7,906.00
NVDA	NVIDIA CORP	0.03%	57	\$7,895.00
JLL	JONES LANG LASALLE INC	0.03%	61	\$7,837.00
FOSL	FOSSIL GROUP INC	0.03%	468	\$7,834.00
BIG	BIG LOTS INC	0.03%	271	\$7,783.00
CNX	CNX RESOURCES CORP	0.03%	649	\$7,632.00
AMBC	AMBAC FINANCIAL GROUP INC	0.03%	485	\$7,581.00
WLL	WHITING PETROLEUM CORP	0.03%	315	\$7,318.00
LM	LEGG MASON INC	0.03%	293	\$7,228.00
BHF	BRIGHTHOUSE FINANCIAL INC	0.03%	226	\$7,221.00
LYV	LIVE NATION ENTERTAINMENT IN	0.03%	141	\$7,211.00
ALV	AUTOLIV INC	0.03%	101	\$7,196.00
OLN	OLIN CORP	0.03%	360	\$6,980.00
IAC	IAC/INTERACTIVECORP	0.03%	39	\$6,922.00
DISCK	DISCOVERY COMMUNICATIONS-C	0.03%	275	\$6,916.00
SBNY	SIGNATURE BANK	0.03%	67	\$6,888.00
NAVI	NAVIENT CORP	0.03%	775	\$6,735.00
MD	MEDNAX INC	0.03%	192	\$6,649.00
ODP	OFFICE DEPOT INC	0.03%	2,528	\$6,446.00
ANF	ABERCROMBIE & FITCH CO-CL A	0.03%	341	\$6,401.00
GME	GAMESTOP CORP-CLASS A	0.03%	504	\$6,340.00
DNOW	NOW INC	0.03%	572	\$6,223.00
OII	OCEANEERING INTL INC	0.02%	433	\$6,036.00
SIG	SIGNET JEWELERS LTD	0.02%	193	\$6,035.00
PTEN	PATTERSON-UTI ENERGY INC	0.02%	552	\$5,956.00
CEIX	CONSOL ENERGY INC	0.02%	185	\$5,903.00
EPC	EDGEWELL PERSONAL CARE CO	0.02%	150	\$5,777.00
GPI	GROUP 1 AUTOMOTIVE INC	0.02%	115	\$5,775.00
DK	DELEK US HOLDINGS INC	0.02%	158	\$5,764.00
CLF	CLIFFS NATURAL RESOURCES INC	0.02%	721	\$5,739.00
CRC	CALIFORNIA RESOURCES CORP	0.02%	332	\$5,724.00
ADSK	AUTODESK INC	0.02%	44	\$5,638.00
TEX	TEREX CORP	0.02%	209	\$5,572.00
CYH	COMMUNITY HEALTH SYSTEMS INC	0.02%	1,799	\$5,559.00
FTR	FRONTIER COMMUNICATIONS CORP	0.02%	2,388	\$5,444.00
SF	STIFEL FINANCIAL CORP	0.02%	136	\$5,382.00
XEC	CIMAREX ENERGY CO	0.02%	84	\$5,356.00
COMM	COMMSCOPE HOLDING CO INC	0.02%	319	\$5,276.00

OIS	OIL STATES INTERNATIONAL INC	0.02%	361	\$5,238.00
CHK	CHESAPEAKE ENERGY CORP	0.02%	2,529	\$5,109.00
DF	DEAN FOODS CO	0.02%	1,177	\$4,943.00
SWN	SOUTHWESTERN ENERGY CO	0.02%	1,368	\$4,911.00
JBGS	JBG SMITH PROPERTIES REIT 0.0	0.02%	132	\$4,815.00
KIM	KIMCO REALTY CORP	0.02%	320	\$4,813.00
KEX	KIRBY CORP	0.02%	73	\$4,709.00
NFX	NEWFIELD EXPLORATION CO	0.02%	318	\$4,601.00
NE	NOBLE CORP PLC	0.02%	1,560	\$4,571.00
JCP	J.C. PENNEY CO INC	0.02%	3,608	\$4,294.00
NBR	NABORS INDUSTRIES LTD	0.02%	1,889	\$4,137.00
ACA	ARCOSA INC	0.02%	177	\$4,092.00
RRC	RANGE RESOURCES CORP	0.02%	378	\$4,086.00
PRSP	PERSPECTA INC	0.02%	218	\$4,077.00
CFFN	CAPITOL FEDERAL FINANCIAL IN	0.02%	306	\$3,944.00
VMC	VULCAN MATERIALS CO	0.02%	41	\$3,933.00
TKR	TIMKEN CO	0.02%	106	\$3,851.00
BBBY	BED BATH & BEYOND INC	0.02%	318	\$3,787.00
HUN	HUNTSMAN CORP	0.02%	207	\$3,786.00
QEP	QEP RESOURCES INC	0.02%	625	\$3,750.00
RDC	ROWAN COMPANIES PLC-A	0.01%	409	\$3,505.00
TGNA	TEGNA INC	0.01%	295	\$3,484.00
TRGP	TARGA RESOURCES CORP	0.01%	88	\$3,436.00
BKD	BROOKDALE SENIOR LIVING INC	0.01%	425	\$3,175.00
DO	DIAMOND OFFSHORE DRILLING	0.01%	327	\$3,126.00
VNE	VEONEER INC	0.01%	101	\$2,592.00
REZI	RESIDEO TECHNOLOGIES INC	0.01%	111	\$2,489.00
APY	APERGY CORP	0.01%	83	\$2,446.00
AKS	AK STEEL HOLDING CORP	0.01%	979	\$2,438.00
SM	SM ENERGY CO	0.01%	145	\$2,214.00
CARS	CARS.COM INC	0.01%	98	\$2,198.00
MDR	MCDERMOTT INTL INC	0.01%	339	\$2,197.00
TDW	TIDEWATER INC	0.01%	94	\$1,984.00
SPN	SUPERIOR ENERGY SERVICES INC	0.01%	499	\$1,707.00
SMTA	SPIRIT MTA REIT 0.0	0.01%	191	\$1,671.00
CBL	CBL & ASSOCIATES PROPERTIES	0.01%	787	\$1,511.00
WFT	WEATHERFORD INTERNATIONAL PL	0.01%	3,776	\$1,383.00
CLR	CONTINENTAL RESOURCES INC/OK	0.00%	30	\$1,227.00
DLPH	DELPHI TECHNOLOGIES PLC-W/I	0.00%	86	\$1,198.00
GTX	GARRETT MOTION INC	0.00%	66	\$815.00
WIN	WINDSTREAM HOLDINGS INC	0.00%	298	\$775.00