



AACEM/ISSA Quarterly Industry Trends Report

Fourth Quarter 2017



Prepared by Market Insights, LLC

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Executive Summary

[Note: This executive summary is the result of the economic situation continuing to grow as the same key variables trend upward driven by the same conditions as outlined in the Third Quarter 2017 edition of this report. Underlying conditions and the situation remain in a virtually unchanged growth pattern, and therefore are consistent for the purposes of this report.]

U.S. Economy Summary

Many economic indicators are pointing toward a period of economic growth in the coming quarters, including:

- Consumer sentiment is at very high levels
- Stock market continues soaring to record highs
- Consumer spending that has been and remains the engine of this growth, continues to increase
- Employment is rising, especially manufacturing employment
- Interest rates and inflation remain low
- Energy costs, though rising, remain low
- New home construction is increasing to near traditional levels
- Existing home sales and prices are rising
- Government spending in the near-term will be a boost to growth
- Recovering global economy.

The following issues will restrain economic growth in the United States in 2017 and pose a threat to the recovery continuing:

- Illegal immigration and refugees could threaten to balloon welfare spending
- Change in Federal Reserve Policy could threaten low rates and the economy
- Labor force participation remains at lower levels
- International discord in the Ukraine, North Korea, and the Middle East and global terrorism could threaten world trade
- Wrong-headed changes to the Affordable Care Act (Obamacare) could hurt economic growth
- The huge U.S. government deficit could have unintended consequences that threaten U.S. economic stability and interest rates.

Comparing the U.S. FLOORReport 2018 Edition flooring forecast dollar value consumption percentage change for the calculated YTD 2017 (as of September 30) results with the same period last year indicates that most U.S. flooring types are performing somewhat near to forecast levels. Wood flooring is the main laggard, as luxury vinyl tile (LVT) and laminate floorings have cannibalized wood flooring sales greater than expected.

U.S. FLOORReport Forecast & Calculated Actual Results

Product Type	FLOORReport FY 2017 Forecast	Y-T-D 2017 Actual	Basis for Estimate
Carpet & Rug	0.3%	0.0%	Company & import reports
Hardwood Flooring	3.6%	-11.4%	Company & import reports
Ceramic Tile	4.8%	4.1%	Company & import reports
Resilient Flooring	8.4%	13.5%	Company & import reports
Laminate Flooring	1.1%	5.7%	Company & import reports
Total Flooring-	0.0%	1.1%	Calculated from above results

Section 2: U.S. Flooring Market Forecast

U.S. Flooring Forecast Summary Report												U.S. FLOORReport- 2018 © Market Insights LLC, 2017
Product Type & Market Segment	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	% of 2016
Resilient Flooring												
Quantity Market (sf, MM):												
Resd'l Replace.	1,035	1,081	1,080	1,282	1,423	1,519	1,590	1,593	1,577	1,583	1,590	49%
New Resd'l	203	240	277	315	341	377	399	423	443	456	464	12%
Commercial	1,065	1,069	1,071	1,066	1,071	1,051	1,098	1,094	1,092	1,098	1,095	37%
Ind'l/ OEM	88	96	102	96	93	99	103	108	117	123	128	3%
Totals-	2,391	2,486	2,531	2,759	2,929	3,047	3,191	3,219	3,228	3,281	3,276	100%
% Change	-	4.0%	1.8%	9.0%	6.2%	4.0%	4.7%	0.9%	0.3%	1.0%	0.5%	
Dollar Value Market (\$, MM @ MSP):												
Resd'l Replace.	876	941	1,006	1,332	1,681	1,872	2,028	2,083	2,107	2,157	2,209	53%
New Resd'l	149	180	213	259	294	339	368	399	425	446	461	9%
Commercial	1,006	1,050	1,067	1,113	1,143	1,168	1,251	1,277	1,306	1,345	1,371	36%
Ind'l/ OEM	44	48	52	49	47	51	53	56	61	64	67	2%
Totals-	\$2,075	\$2,220	\$2,337	\$2,753	\$3,165	\$3,430	\$3,701	\$3,816	\$3,899	\$4,013	\$4,108	100%
% Change	-	7.0%	5.3%	17.8%	15.0%	8.4%	7.9%	3.1%	2.2%	2.9%	2.4%	
Average Price (\$/sq. ft.)	\$0.87	\$0.89	\$0.92	\$1.00	\$1.08	\$1.13	\$1.16	\$1.19	\$1.21	\$1.23	\$1.25	
Total Value by Type (\$, MM @ MSP):												
Resilient Sheet	756	816	836	852	844	860	916	931	946	966	980	27%
Resilient Tile/VCT	478	472	450	468	450	437	442	435	429	427	423	14%
Luxury Vinyl Tile	842	931	1,051	1,433	1,871	2,133	2,343	2,449	2,524	2,619	2,705	59%
Totals-	\$2,075	\$2,220	\$2,337	\$2,753	\$3,165	\$3,430	\$3,701	\$3,816	\$3,899	\$4,013	\$4,108	100%
Laminate Flooring												
Quantity Market (sf, MM):												
Resd'l Replace.	811	831	791	797	781	782	787	775	758	759	764	86%
New Resd'l	48	57	80	71	67	60	53	47	42	37	32	7%
Commercial	44	47	50	52	55	54	61	62	63	64	70	6%
Ind'l/ OEM	1	1	1	1	1	1	1	1	1	1	1	0%
Totals-	903	935	922	921	903	898	903	885	865	862	868	100%
% Change	-	3.5%	-1.5%	0.0%	-2.0%	-0.6%	0.5%	-1.9%	-2.3%	-0.4%	0.7%	
Dollar Value Market (\$, MM @ MSP):												
Resd'l Replace.	828	865	839	871	871	890	913	917	915	934	960	86%
New Resd'l	47	56	81	74	71	65	59	54	49	44	39	7%
Commercial	55	60	66	71	76	76	88	91	94	98	109	7%
Ind'l/ OEM	1	1	1	1	1	1	1	1	2	2	2	0%
Totals-	\$929	\$982	\$987	\$1,017	\$1,018	\$1,032	\$1,061	\$1,063	\$1,060	\$1,078	\$1,109	100%
% Change	-	5.6%	0.5%	3.1%	0.1%	1.4%	2.8%	0.2%	-0.3%	1.7%	2.9%	
Average Price (\$/sq. ft.)	\$1.03	\$1.05	\$1.07	\$1.10	\$1.13	\$1.15	\$1.18	\$1.20	\$1.23	\$1.25	\$1.28	
Wood Flooring												
Quantity Market (sf, MM):												
Resd'l Replace.	602.9	652.0	627.6	760.5	764.1	761.1	782.5	817.9	825.4	852.0	879.3	59%
New Resd'l	242.1	290.2	350.0	357.4	382.6	413.7	433.0	453.5	473.6	486.5	490.5	30%
Commercial	48.1	49.0	50.8	49.3	49.3	51.9	53.9	55.2	56.5	58.1	58.7	4%
Ind'l/ OEM	41.0	66.3	74.8	75.8	92.0	94.5	90.9	77.0	87.5	85.2	80.8	7%
Totals-	934.1	1,057.4	1,103.2	1,243.0	1,288.0	1,321.3	1,360.4	1,403.6	1,443.0	1,481.7	1,509.4	100%
% Change	-	13.2%	4.3%	12.7%	3.6%	2.6%	3.0%	3.2%	2.8%	2.7%	1.9%	
Dollar Value Market (\$, MM @ MSP):												
Resd'l Replace.	1,436	1,602	1,583	1,953	1,988	2,006	2,094	2,219	2,273	2,381	2,494	60%
New Resd'l	531	659	816	846	920	1,011	1,074	1,143	1,212	1,264	1,294	28%
Commercial	126	132	141	138	140	150	158	164	170	178	182	4%
Ind'l/ OEM	102	164	188	197	245	257	248	209	242	238	227	7%
Totals-	\$2,194	\$2,558	\$2,727	\$3,134	\$3,293	\$3,423	\$3,574	\$3,734	\$3,897	\$4,060	\$4,197	100%
% Change	-	16.6%	6.6%	14.9%	5.1%	3.9%	4.4%	4.5%	4.3%	4.2%	3.4%	
Average Price (\$/sq. ft.)	\$2.35	\$2.42	\$2.47	\$2.52	\$2.56	\$2.59	\$2.63	\$2.66	\$2.70	\$2.74	\$2.78	
Total Value by Type (\$, MM @ MSP):												
Engineered	1,154	1,429	1,512	1,736	1,896	2,019	2,102	2,209	2,318	2,414	2,493	58%
Solid/ Pre-Finished	700	771	842	932	933	951	1,012	1,065	1,118	1,167	1,208	28%
Solid/ Site-Finished	314	330	344	439	439	427	434	435	435	454	470	13%
Parquet	26	27	28	27	25	26	26	26	26	26	26	1%
Totals-	\$2,194	\$2,558	\$2,727	\$3,134	\$3,293	\$3,423	\$3,574	\$3,734	\$3,897	\$4,060	\$4,197	100%
Bamboo Flooring	88	102	102	110	107	103	107	112	117	122	126	3%
Cork Flooring	43	50	50	56	58	58	61	60	62	61	63	2%

U.S. Flooring Market Forecast

U.S. Flooring Forecast Summary Report												U.S. FLOORReport- 2018 © Market Insights LLC, 2017
Product Type & Market Segment	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	% of 2016
Ceramic Floor & Wall Tile												
Quantity Market (sf, MM):												
Resd'l Replace.	1,249	1,429	1,320	1,449	1,483	1,523	1,577	1,597	1,609	1,657	1,707	53%
New Resd'l	424	520	624	703	757	803	833	861	898	923	931	27%
Commercial	526	532	556	555	577	587	662	688	715	749	777	20%
Ind'l/OEM	3	4	4	5	6	7	8	9	10	11	12	0%
Totals-	2,202	2,485	2,503	2,712	2,823	2,921	3,079	3,154	3,232	3,340	3,427	100%
% Change	-	12.8%	0.8%	8.3%	4.1%	3.5%	5.4%	2.4%	2.5%	3.3%	2.6%	
Dollar Value Market (\$, MM @ MSP):												
Resd'l Replace.	1,295	1,546	1,509	1,683	1,750	1,826	1,920	1,975	2,022	2,116	2,214	51%
New Resd'l	380	487	617	706	773	833	878	922	977	1,018	1,043	22%
Commercial	736	763	845	857	907	933	1,074	1,132	1,195	1,270	1,338	26%
Ind'l/OEM	3	4	4	5	6	8	9	10	11	12	14	0%
Totals-	\$2,415	\$2,799	\$2,975	\$3,252	\$3,436	\$3,601	\$3,881	\$4,039	\$4,205	\$4,417	\$4,608	100%
% Change	-	15.9%	6.3%	9.3%	5.7%	4.8%	7.8%	4.1%	4.1%	5.0%	4.3%	
Average Price (\$/sq. ft.)	\$1.10	\$1.13	\$1.19	\$1.20	\$1.22	\$1.23	\$1.26	\$1.28	\$1.30	\$1.32	\$1.34	
Total Value by Type (\$, MM @ MSP):												
Floor Tile	1,959	2,288	2,418	2,656	2,825	2,972	3,238	3,391	3,541	3,735	3,915	82%
Wall/Other Tile	456	511	557	596	611	629	643	648	664	682	693	18%
Totals-	\$2,415	\$2,799	\$2,975	\$3,252	\$3,436	\$3,601	\$3,881	\$4,039	\$4,205	\$4,417	\$4,608	100%
% Floor/Total	81%	82%	81%	82%	82%	83%	83%	84%	84%	85%	85%	
Total Porcelain Tile	\$1,811	\$2,099	\$2,231	\$2,439	\$2,577	\$2,700	\$2,911	\$3,030	\$3,154	\$3,313	\$3,456	
% Porcelain/Total	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
Carpet & Rugs												
Carpet Rollgoods & Tile												
Quantity Market (sf, MM):												
Resd'l Replace.	5,269	5,412	5,252	4,947	5,067	5,060	5,090	5,007	4,898	4,896	4,954	57%
New Resd'l	708	898	1,029	1,154	1,231	1,264	1,246	1,219	1,232	1,225	1,178	14%
Commercial	2,505	2,504	2,485	2,465	2,416	2,409	2,497	2,434	2,388	2,360	2,332	27%
Ind'l/OEM	159	173	185	202	234	284	296	311	335	353	368	3%
Totals-	8,641	8,987	8,951	8,768	8,948	9,017	9,128	8,971	8,852	8,834	8,831	100%
Total/ Sq. Yds. (MM)	960	999	995	974	994	1,002	1,014	997	984	982	981	100%
% Change	-	4.0%	-0.4%	-2.0%	2.1%	0.8%	1.2%	-1.7%	-1.3%	-0.2%	0.0%	
Dollar Value Market (\$, MM @ MSP):												
Resd'l Replace.	4,136	4,264	4,074	3,729	3,677	3,572	3,631	3,611	3,570	3,608	3,690	34%
New Resd'l	498	634	721	788	809	808	805	796	813	816	794	7%
Commercial	3,525	3,600	3,704	3,771	3,741	3,830	4,009	3,977	3,967	3,941	3,956	35%
Ind'l/OEM	467	507	540	577	598	623	637	647	659	661	670	6%
Totals-	\$8,626	\$9,004	\$9,039	\$8,865	\$8,825	\$8,833	\$9,083	\$9,032	\$9,009	\$9,027	\$9,110	82%
% Change	-	4.4%	0.4%	-1.9%	-0.5%	0.1%	2.8%	-0.6%	-0.3%	0.2%	0.9%	
Average Price (\$/sq.yd.)	\$8.98	\$9.02	\$9.09	\$9.10	\$8.88	\$8.82	\$8.96	\$9.06	\$9.16	\$9.20	\$9.28	
Area Rugs & Bath Mats												
Dollar Value Market (\$,MM @ MSP)	\$2,280	\$2,224	\$2,324	\$2,521	\$2,585	\$2,637	\$2,689	\$2,743	\$2,798	\$2,854	\$2,911	24%
Total Carpet & Rugs												
Dollar Value Market (\$,MM @ MSP)	\$10,439	\$10,722	\$10,823	\$10,809	\$10,812	\$10,846	\$11,135	\$11,128	\$11,148	\$11,220	\$11,352	106%
% Change (Yr-Yr)	-	2.7%	0.9%	-0.1%	0.0%	0.3%	2.7%	-0.1%	0.2%	0.6%	1.2%	
Total Carpets & Rugs												
% of Total Carpet & Rugs Dollar Value of Consumption:												
Broadloom Rolls	61.7%	61.7%	59.7%	55.8%	54.4%	52.3%	52.0%	50.9%	49.9%	49.1%	48.5%	
6'-Rolls & Tile	16.5%	17.5%	18.8%	20.9%	21.7%	23.4%	23.8%	24.4%	25.0%	25.5%	25.9%	
Area Rugs	21.8%	20.7%	21.5%	23.3%	23.9%	24.3%	24.2%	24.7%	25.1%	25.4%	25.6%	
Total Market-	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

U.S. Flooring Market Forecast

U.S. Flooring Forecast
Summary Report

U.S. FLOORReport- 2018
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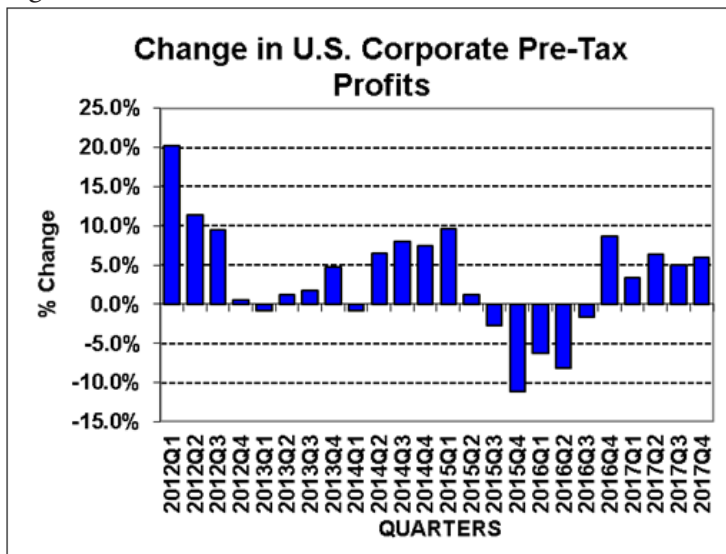
Product Type & Market Segment	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	% of 2016
Rubber Flooring												
Quantity Market (sf, MM)	2,440	2,510	2,688	2,911	2,779	2,742	2,740	2,782	2,754	2,722	2,704	
% Change	--	2.9%	7.1%	8.3%	-4.6%	-1.3%	-0.1%	1.6%	-1.0%	-1.2%	-0.7%	
Dollar Value Market (\$MM @ MSP)	\$486	\$504	\$544	\$594	\$572	\$569	\$573	\$586	\$585	\$583	\$584	
% Change	--	3.7%	7.9%	9.2%	-3.8%	-0.5%	0.7%	2.4%	-0.2%	-0.4%	0.1%	
Average Price (\$/sq. ft.)	\$0.20	\$0.20	\$0.20	\$0.20	\$0.21	\$0.21	\$0.21	\$0.21	\$0.21	\$0.21	\$0.22	
Total Flooring (xcluding Rubber)*												
Quantity Market (sq. MM):												
Resd'l Replace.	8,967	9,405	9,069	9,236	9,519	9,647	9,827	9,790	9,667	9,748	9,894	56%
New Resd'l	1,625	2,005	2,360	2,601	2,778	2,918	2,964	3,004	3,089	3,128	3,095	16%
Commercial	4,188	4,201	4,214	4,187	4,168	4,153	4,372	4,333	4,315	4,330	4,332	25%
Ind'l/OEM	292	339	367	379	426	486	499	506	550	573	590	3%
Totals-	15,071	15,950	16,010	16,403	16,891	17,203	17,661	17,633	17,621	17,779	17,911	100%
% Change	--	5.8%	0.4%	2.5%	3.0%	1.8%	2.7%	-0.2%	-0.1%	0.9%	0.7%	
Dollar Value Market (\$ MM @ MSP):												
Resd'l Replace.	8,570	9,217	9,011	9,568	9,966	10,165	10,586	10,805	10,887	11,196	11,567	53%
New Resd'l	1,605	2,016	2,446	2,674	2,866	3,056	3,184	3,314	3,475	3,589	3,630	15%
Commercial	5,447	5,606	5,823	5,950	6,007	6,158	6,580	6,641	6,733	6,832	6,956	32%
	15,623	16,839	17,280	18,192	18,840	19,379	20,350	20,761	21,095	21,617	22,152	100%
Ind'l/OEM*	149	217	244	251	300	317	312	276	315	317	310	--
Area Rugs	2,280	2,224	2,324	2,521	2,585	2,637	2,689	2,743	2,798	2,854	2,911	--
Rubber Floors & Mats*	486	504	544	594	572	569	573	586	585	583	584	--
Totals-	18,539	19,784	20,392	21,558	22,296	22,901	23,924	24,366	24,794	25,370	25,957	
% Change	--	6.7%	3.1%	5.7%	3.4%	2.7%	4.5%	1.9%	1.8%	2.3%	2.3%	
*Note: Rubber Flooring excluded from Total Flooring because a significant amount of Rubber Flooring is mats and floor runners and these products go atop other floorings thereby causing double-counting of floor area; Carpet OEM included with Residential & Commercial figures												
Average Price (\$/sq. ft.)	\$1.23	\$1.24	\$1.27	\$1.31	\$1.32	\$1.33	\$1.35	\$1.38	\$1.41	\$1.43	\$1.45	

Section 3: Commercial Market Report

[Note: The Commercial Market Report analyses are nearly identical to the previous quarter's report as underlying conditions and the market situation remain in a virtually unchanged growth pattern. Updates to the market figures are updated accordingly.]

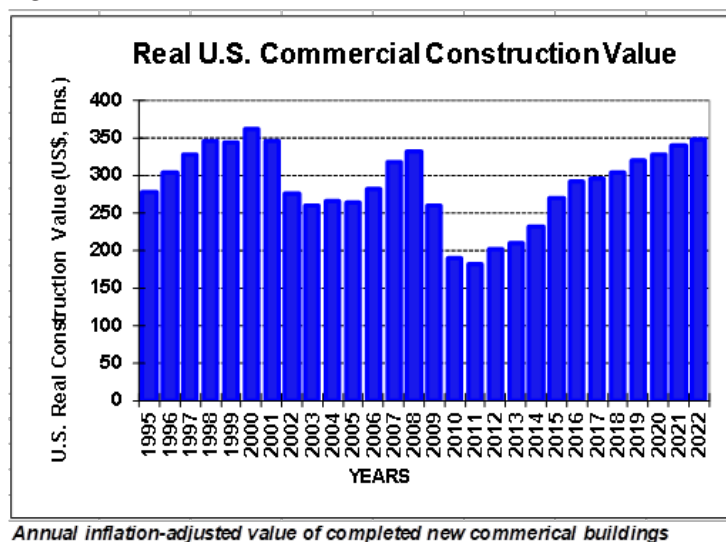
Corporate pre-tax profits in the United States had been under pressure most of 2016 (re: Figure 1) as global competition intensified, regulations increased, and uncertainty hampered business investment and productivity, and the internet transformed the way firms do business. Rebounding at year-end 2016, the commercial market has generally shown a positive trend since then. A period of growth in corporate profits generally portends a business expansion, hiring, and facility expansion and renovation, at the end of which are flooring sales.

Figure 1 – Pre-Tax Profit Growth



Real commercial construction is forecasted to grow annually through 2022 with various sectors showing differing levels of gains or losses (re: Fig. 2):

Figure 2



The following are comments on commercial construction in the United States by summary building type:

Institutional

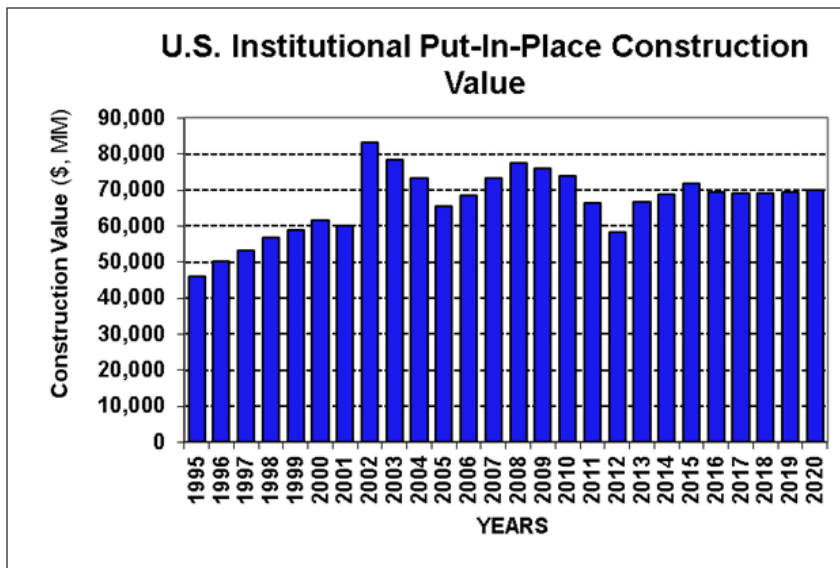
Encompassing religious, public safety (prisons, police stations, courthouses, etc.), amusement and recreation, museums and libraries, military facilities, and transportation terminals, this segment is nearly two-thirds financed by government sources and depends heavily on the condition of local, state, and federal finances and their policies. Construction in this segment overall will be flat with a mixed result by building type (re: Fig. 3).

With federal and state government finances finally on the mend and a significant rise in deportations and roundups of illegal aliens, the need for an increase in prison capacity is certain. However, the Trump administration favors privately run prisons. Prison construction should remain constant through 2020.

The incoming Trump administration has threatened to decrease the size of Federal government, so employment or office construction at the Federal level will not grow during the next several years.

Several major stadium projects are underway with others in the planning stages. Also, expansion of local casinos will continue across the nation, threatening Atlantic City and Las Vegas and causing such project types to see good growth.

Figure 3



Declining church attendance, difficulty in gaining financing, and many churches seeing declines in tithes and giving has caused major declines in religious construction. However, an improving economic situation should see a shift in giving and raise church construction slightly over the coming years. However, any gains will not be able to offset a decline in overall church attendance, which will see religious construction show a major decline.

Airports will need to upgrade facilities to accommodate new wide-body aircraft and a growing passenger volume. Also, facilities damaged by recent hurricanes will need to be repaired.

Trends affecting this segment include:

- Economic conditions
- Government finances
- Rising incarceration rates
- Increasing population

Education

Includes all secondary schools (elementary, middle, and high schools), colleges and universities, dormitories related to schools and colleges, and all other school and college campus facilities (e.g., libraries, gymnasiums, etc.).

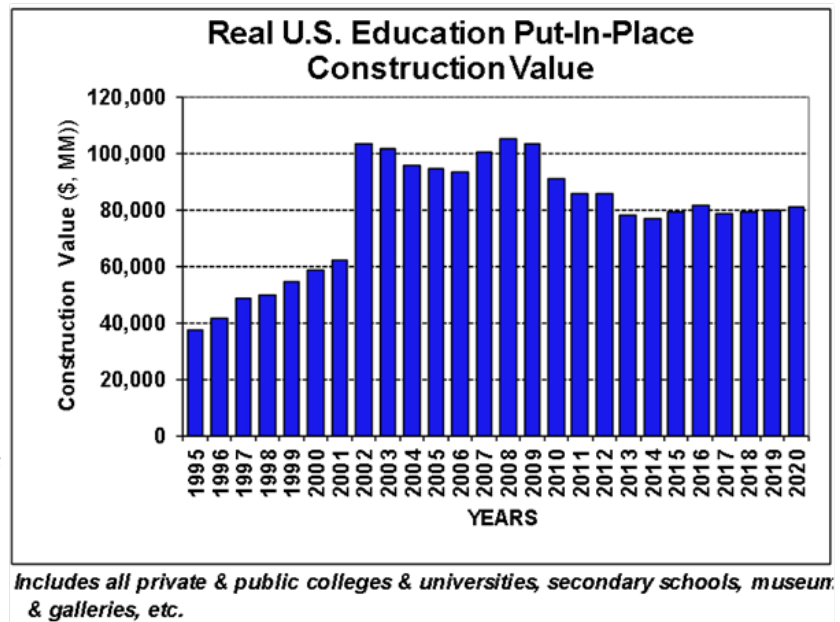
Federal aid will diminish as the Trump administration reduces Federal authority in education and emphasizes state and local control of schools and curriculum. Changing populations, caused by relocating seniors, decreasing the tax base, and more young people living in metro areas will be a challenge to school planning.

Year-round schools along with renovations and additions to existing school buildings will help control potential overcrowding. Also, the Trump administration is championing school vouchers to provide school choice and the improvement of education through competition, especially in inner-city areas.

These trends are influencing education construction and renovation:

- School enrollments will grow 2.5 million in the next four years
- University capital spending is accelerating as endowments are benefiting from rising stock prices
- Rise in distance learning and online courses
- High cost of tuition and rising student loan burdens
- Greater focus on safe schools to reduce the threat of on-campus shootings;
- The increase of modular and prefabricated school buildings has reduced construction costs
- Trump administration's support for school voucher programs will diminish public school enrollment and enhance alternate schools (e.g., charter, private, magnet, etc.).

Figure 4



Health Care

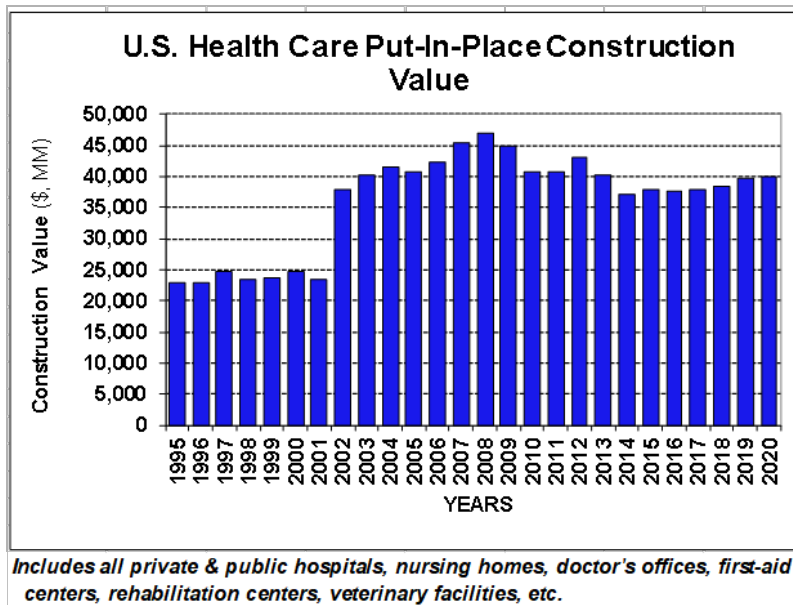
Health care facilities include hospitals and clinics, doctors' offices, medical, rehabilitation, and veterinary facilities, and nursing homes.

Health care construction and renovation is finally returning to a more historical growth rate, and growth in this segment will remain steady and continue through 2020. Traditional large hospital projects are again finding their way into planning activities and starts, however, the bulk of work in this segment will be renovation and additions as well as outpatient care.

The following factors are driving health care construction spending:

- Hospitals are cautious with new investment due to the changing nature of health care and insurance, as well as the need for more qualified health care workers
- Veterans Affairs (VA) hospitals have been rocked by poor management and patient care, old facilities, and huge cost overruns
- Ambulatory care now accounts for about one-third of health care spending, slightly more than inpatient care
- Potential significant changes to the Affordable Care Act planned by the Trump administration and the Republican Congress
- New model for hospitals is medical centers with a cluster of offices including beds, which will deliver more of a patient's needs
- Nontraditional funding sources for private, nonprofit facilities: private development and equity, government or government-backed, and pension and life insurance companies.

Figure 5



Retail

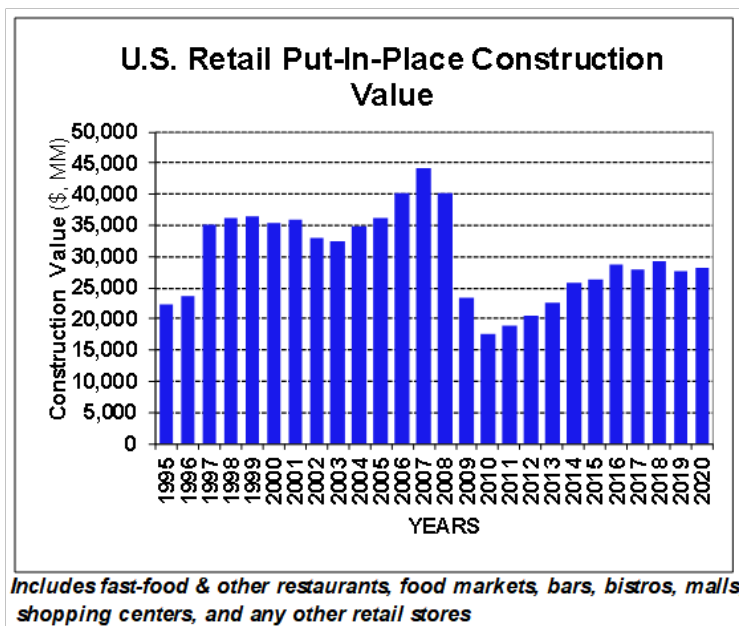
Building types included as retail are all retail stores and supermarkets, shopping malls and centers, restaurants, bars, bistros, and selected service facilities such as cleaners, tailors, auto showrooms, etc. Retail construction traditionally follows residential construction, creating a demand for new retail outlets in and around new residential developments, lagging the housing market by 12 to 18 months. However, rising e-commerce sales will dilute the need for new retail stores. Among the fastest growing store types are drinking places, food service, and building-material outlets.

It is expected that traditional shopping venues will likely result in a merging of online and bricks-and-mortar shopping. Despite a significant growth in online shopping, also occurring is an economic bifurcation whereby most shoppers seek the lowest-price retail stores and wealthier shoppers move to upscale, multiuse centers.

Retail store construction is heavily influenced by the following:

- The increase in housing starts will eventually promote new retail store construction
- Consumer spending and changing consumer buying habits
- Vacant big-box stores that undergo renovations, such as repositioning for health care and educational purposes and multi-use facilities
- Online retail sales are increasing, driving smaller-size stores that combine in-store and online sales
- Closings of major chain stores such as Sears, JC Penney, and RadioShack signal a change in consumer shopping habits.

Figure 6



Offices

Includes all professional and other offices (lawyers, doctors, accountants, realtors, etc.), and office complexes. Office construction is highly dependent on employment.

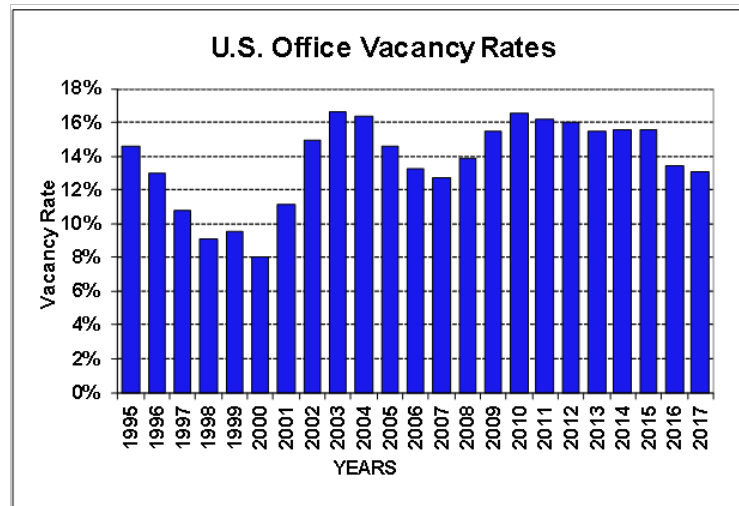
In the United States, high office vacancy rates have led to increased incentives and concessions, which have served to decrease the vacancy rate (re: Fig. 7).

Office construction is influenced by the following:

- Vacancy rates
- Corporate profitability
- Unemployment rate
- Individuals working from home
- Employment and workplace automation
- Interest rates on construction loans.

Traditionally, the economy improves and unemployment drops as hiring rises and the need for new office space is required. Office construction will grow modestly through the next several years to accommodate the employees required to handle the growing business from the rising economy. However, the need for new employees is diminished by productivity gains via automation (re: Fig. 8).

Figure 7



Annual vacant & For Lease office floor area percent of total

Source: CB Richard Ellis

Figure 8



Includes professional offices (law, engineering, etc.), banks, & financial firm's offices, etc.

Lodgings

This segment is composed of dormitory, hotel, and motel construction.

Following a major dip in construction in 2010 through 2011, lodgings construction had been improving as occupancy rates for hotels and motels also rose. It is expected that occupancy rates will continue to improve as the U.S. economy regains strength. Competition from startups such as Airbnb will be a continuing drag on growth.

Several trends are currently driving this segment:

- Both business and leisure travel are improving; technology is reducing the need for business travel; however, the economic recovery should increase vacation travel
- Growth of alternative lodging systems like Airbnb
- The green movement is losing traction due to greater initial cost perceptions.

Figure 9



Section 4: Economic & Commercial Market Tables

Key U.S. Market Measures

Explanation of Measures Shown Below:

- (1)= Change in Leading Economic Indicator Index: Percent change in Leading Economic Indicators Index, current versus immediately prior period, shown at an annual rate; Index components are a mix of various economic variables.
- (2)= Real GDP Growth: Growth in overall economy; the inflation-adjusted, value of all domestic goods and services in the nation; traditional trend growth in the U.S. = 2.2% per annum: a. Year-to-Year: Percent change based on the current year compared to the prior year
b. Period-to-Period: Annualized percent change based on the current quarter compared to the immediately prior quarter
- (3)= Bank Prime Rate: Average interest rate charged by banks to their best customers
- (4)= Change in Consumer Price Index: Percent change in consumer prices for all items
- (5)= Change in Real Personal Consumption Expenditures: Percent change in the inflation-adjusted value of all consumer purchases of goods and services
- (6)= Change in Real Disposable Personal Income: Percent change in the inflation-adjusted value of all consumers' income after taxes and government social security & Medicare insurance premiums
- (7)= Total Housing Starts: Number of new housing units started in thousands & percent change; quarterly figures at seasonally adjusted annual rate
- (8)= Household Growth: Percent change in the number of new households per period at an annual rate; Source: US Census Bureau
- (9)= Change in Real Commercial Construction: Inflation-adjusted value and percent change in all commercial construction
- (10)= Corporate Pre-Tax Profits: Actual value and percent change in the pre-tax profits of all privately-held corporations

Key U.S. Measures

Period	Forecast=F	(1)	(2)		(3)	(4)	(5)	(6)	(7)		(8)	(9)		(10)	
		Overall Economy					Residential/Consumer Market					Commercial Market			
		Chg. In Leading Ec. Ind.	Real GDP Growth		Bank Prime Rate	Change in CPI	Change in Real P.C.E.	Chg. in Real Dis. Pers.Inc.	Total Housing Starts		Hshold. Growth	Real Value of Comm'l Constr.		Corp. Pre-Tax Profits	
			% Chg. (Yr.-Yr.)	% Chg. (Pd.-Pd.)					Starts	% Chg.		Value	% Chg.	Value	% Chg.
		(% chg.)	(% chg.)	(% chg.)	(%)	(% chg.)	(% chg.)	(% chg.)	(units, M)	(% chg.)	(% chg.)	(09\$Bns.)	(% chg.)	(\$Bns.)	(% chg.)
Annual Results :															
2000		1.8%	4.1%	4.1%	9.23%	3.4%	5.1%	5.0%	1,573	-4.5%	0.0%	360.7	5.4%	781	-5.9%
2001		-7.5%	1.0%	1.0%	6.92%	2.8%	2.6%	2.8%	1,601	1.8%	1.4%	344.7	-4.4%	754	-3.5%
2002		0.8%	1.8%	1.8%	4.68%	1.6%	2.6%	3.1%	1,710	6.8%	1.2%	275.4	-20.1%	907	20.3%
2003		3.0%	2.8%	2.8%	4.12%	2.3%	3.1%	2.7%	1,854	8.4%	1.3%	259.4	-5.8%	1,056	16.5%
2004		9.8%	3.8%	3.8%	4.34%	2.7%	3.8%	3.6%	1,949	5.2%	0.7%	265.1	2.2%	1,283	21.5%
2005		5.2%	3.3%	3.3%	6.19%	3.4%	3.5%	1.5%	2,073	6.3%	1.0%	263.3	-0.7%	1,478	15.1%
2006		0.9%	2.7%	2.7%	7.96%	3.2%	3.0%	4.0%	1,812	-12.6%	1.0%	281.2	6.8%	1,647	11.4%
2007		-2.1%	1.8%	1.8%	8.05%	2.9%	2.2%	2.1%	1,342	-25.9%	1.1%	317.4	12.9%	1,529	-7.1%
2008		-11.2%	-0.3%	-0.3%	5.09%	3.8%	-0.3%	1.5%	900	-32.9%	0.5%	331.9	4.6%	1,285	-16.0%
2009		-13.8%	-2.8%	-2.8%	3.25%	-0.3%	-1.6%	-0.4%	554	-38.4%	0.1%	259.0	-22.0%	1,397	8.7%
2010		7.4%	2.5%	2.5%	3.25%	1.6%	1.9%	1.0%	586	5.7%	0.6%	188.7	-27.1%	1,748	25.0%
2011		5.2%	1.6%	1.6%	3.25%	3.1%	2.3%	2.5%	612	4.5%	1.0%	181.7	-3.7%	1,817	4.0%
2012		2.1%	2.2%	2.2%	3.25%	2.1%	1.5%	3.1%	784	28.1%	1.0%	200.4	10.3%	1,998	10.0%
2013		2.9%	1.7%	1.7%	3.25%	1.5%	1.5%	-1.4%	928	18.4%	1.0%	208.8	4.2%	2,033	1.7%
2014		5.6%	2.6%	2.6%	3.25%	1.6%	2.9%	3.6%	1,001	7.8%	0.8%	231.9	11.1%	2,141	5.3%
2015		4.4%	2.9%	2.9%	3.26%	0.1%	3.6%	4.2%	1,107	10.6%	1.1%	269.5	16.2%	2,117	-1.1%
2016		1.2%	1.5%	1.5%	3.51%	1.3%	2.7%	1.4%	1,177	6.3%	0.7%	291.8	8.3%	2,073	-2.1%
2017	F	3.2%	2.2%	2.2%	4.03%	2.1%	2.7%	1.4%	1,194	1.4%	0.6%	294.9	1.1%	2,180	5.2%
2018	F	#N/A	2.4%	2.4%	#N/A	1.7%	2.5%	2.5%	1,304	9.2%	1.3%	303.4	2.9%	2,376	9.0%
2019	F	#N/A	2.2%	2.2%	#N/A	2.2%	2.3%	3.0%	1,396	7.1%	1.2%	320.0	5.5%	2,487	4.7%
2020	F	#N/A	2.2%	2.2%	#N/A	2.7%	2.4%	2.8%	1,444	3.4%	1.1%	326.8	2.1%	2,557	2.8%
2021	F	#N/A	2.2%	2.2%	#N/A	2.4%	2.4%	2.6%	1,487	3.0%	1.0%	339.6	3.9%	2,651	3.7%
2022	F	#N/A	2.1%	2.1%	#N/A	2.4%	2.3%	2.4%	1,505	1.2%	1.0%	347.4	2.3%	2,743	3.5%

Key U.S. Measures														Table #1	
Period	Forecast = F	(1)	(2)		(3)	(4)	(5)	(6)	(7)		(8)	(9)		(10)	
		Overall Economy					Residential/Consumer Market					Commercial Market			
		Chg. In Leading Ec. Ind.	Real GDP Growth		Bank Prime Rate	Change in CPI	Change in Real P.C.E.	Chg. in Real Dis. Pers.Inc.	Total Housing Starts		Hshold. Growth	Real Value of Comm'l Constr.		Corp. Pre-Tax Profits	
		(% chg.)	% Chg. (Yr.-Yr.)	% Chg. (Pd.-Pd.)	(%)	(% chg.)	(% chg.)	(% chg.)	(units, M)	(% chg.)	(% chg.)	Value (2009 \$.)	% Chg. (% chg.)	Value (\$Bns.)	% Chg. (% chg.)
Quarterly Results:												Bns., SAAR)			
2012Q1		4.8%	2.8%	2.7%	3.25%	2.8%	1.0%	6.8%	707	21.5%	1.0%	194.4	16.1%	2,016	20.2%
2012Q2		0.9%	2.5%	1.9%	3.25%	1.9%	1.0%	9.4%	739	28.7%	1.0%	200.5	11.5%	1,994	11.4%
2012Q3		-0.5%	2.4%	0.5%	3.25%	1.7%	1.0%	8.3%	780	26.0%	1.0%	203.5	8.4%	1,989	9.4%
2012Q4		2.2%	1.3%	0.1%	3.25%	1.9%	1.1%	10.6%	908	35.2%	1.1%	203.3	6.0%	1,984	0.6%
2013Q1		4.0%	1.3%	2.8%	3.25%	1.7%	1.2%	10.4%	952	34.6%	1.2%	205.2	5.5%	2,000	-0.8%
2013Q2		2.8%	1.0%	0.8%	3.25%	1.4%	1.1%	11.6%	886	17.1%	1.1%	203.2	1.4%	2,019	1.3%
2013Q3		4.5%	1.7%	3.1%	3.25%	1.5%	1.0%	11.4%	883	13.2%	1.0%	211.0	3.7%	2,035	1.8%
2013Q4		5.9%	2.7%	3.9%	3.25%	1.2%	0.8%	0.9%	1,012	11.4%	0.8%	215.7	6.1%	2,078	4.7%
2014Q1		5.6%	1.7%	-0.9%	3.25%	1.5%	0.7%	-5.9%	941	-1.2%	0.7%	216.0	5.3%	1,985	-0.8%
2014Q2		5.7%	2.7%	4.5%	3.25%	2.0%	0.8%	-5.2%	984	13.7%	0.8%	225.1	10.8%	2,149	6.5%
2014Q3		6.6%	3.2%	5.1%	3.25%	1.8%	0.9%	-4.3%	1,023	15.8%	0.9%	234.3	11.1%	2,197	8.0%
2014Q4		5.3%	2.7%	2.0%	3.25%	1.2%	1.0%	2.8%	1,056	4.4%	1.0%	252.1	16.8%	2,232	7.4%
2015Q1		3.8%	3.8%	3.2%	3.25%	-0.1%	1.1%	8.0%	987	4.9%	1.1%	258.2	19.6%	2,176	9.6%
2015Q2		4.9%	3.3%	2.7%	3.25%	0.0%	1.1%	8.4%	1,156	17.4%	1.1%	277.2	23.1%	2,175	1.2%
2015Q3		1.0%	2.4%	1.6%	3.25%	0.1%	1.1%	8.5%	1,161	13.5%	1.1%	273.9	16.9%	2,136	-2.8%
2015Q4		2.3%	2.0%	0.5%	3.25%	0.4%	1.0%	2.2%	1,124	6.4%	1.0%	268.4	6.5%	1,983	-11.1%
2016Q1		-1.3%	1.4%	0.6%	3.50%	1.1%	1.0%	5.4%	1,153	16.8%	1.0%	279.6	8.3%	2,041	-6.2%
2016Q2		1.5%	1.2%	2.2%	3.50%	1.1%	0.8%	4.5%	1,158	0.2%	0.8%	287.8	3.8%	1,997	-8.2%
2016Q3		2.2%	1.5%	2.8%	3.50%	1.1%	0.7%	0.1%	1,150	-1.0%	0.7%	300.4	9.7%	2,101	-1.6%
2016Q4		2.3%	1.8%	1.7%	3.55%	1.8%	0.5%	7.8%	1,248	11.0%	0.5%	299.4	11.5%	2,155	8.7%
2017Q1		5.4%	2.0%	1.2%	3.79%	2.6%	0.3%	5.0%	1,238	7.3%	0.3%	299.2	7.0%	2,109	3.3%
2017Q2		4.2%	2.2%	3.0%	4.04%	1.9%	0.4%	1.5%	1,167	0.8%	0.4%	296.0	2.9%	2,123	6.4%
2017Q3	F	4.2%	2.3%	3.3%	4.25%	2.0%	0.8%	0.5%	1,159	0.8%	0.8%	289.7	-3.6%	2,206	5.0%
2017Q4	F	#N/A	2.6%	2.8%	#N/A	1.8%	1.0%	-3.6%	1,211	-3.0%	1.0%	294.7	-1.6%	2,283	5.9%
2018Q1	F	#N/A	2.9%	2.1%	#N/A	1.4%	1.2%	-3.5%	1,254	1.4%	1.2%	296.3	-1.0%	2,299	9.0%
2018Q2	F	#N/A	2.6%	2.0%	#N/A	1.8%	1.4%	-1.5%	1,276	9.4%	1.4%	299.6	1.2%	2,338	10.1%
2018Q3	F	#N/A	2.3%	2.2%	#N/A	1.8%	1.2%	2.8%	1,325	14.3%	1.2%	305.4	5.4%	2,405	9.0%
2018Q4	F	#N/A	2.2%	2.6%	#N/A	1.9%	1.2%	5.3%	1,359	12.2%	1.2%	312.0	5.9%	2,460	7.8%
Remarks & Notes															
- All dollar values in US Dollars															
- Quarterly figures are at seasonally adjusted annual rates, unless noted otherwise															
- Quarterly percent change is current quarter versus same quarter prior year, unless noted otherwise															
- Inflation-adjusted "real" values are expressed in constant, chained 2009 US Dollars															
- All actual figures are sourced from the U.S. Census Bureau and forecasts are as per Global Insights, unless noted otherwise															

Explanation of Measures Shown Below:									
(1)=	Corporate Pre-Tax Profits	Actual value and percent change in the pre-tax profits of all privately-held corporations							
(2)=	Office Vacancy Rate:	The share of total office space that is vacant in the U.S.; includes both downtown & suburban areas combined; Source: Coldwell Banker							
(3)=	Real Value of Commercial Put-In-Place Construction:	Inflation-adjusted value of completed commercial construction by type; published current values are adjusted using the chained price deflator for non-farm construction to obtain the inflation-adjusted values shown (forecasts Source: FMI Corp.):							
-	Total=	Total of all individual private & public building types shown							
-	Lodging=	All hotel and motel buildings							
-	Office=	All professional & other offices, including: financial, law & other professional offices, corporate offices, etc.							
-	Commercial/ Food & Beverage=	All restaurants & fast food stores, bars and bistros, and supermarkets, auto sales showrooms, and other retail store types							
-	Commercial/ Multi-Retail=	All malls, shopping centers, and general merchandise facilities							
-	Health Care=	All hospitals & clinics, doctor's offices, medical, rehabilitation, & veterinary facilities, and nursing homes							
-	Education=	All private & public secondary school and college buildings, dormitories, and museums & galleries related to the schools							
-	Religious=	All houses of worship							
-	Public Safety=	All police & fire stations, jails & prisons, and associated government administration buildings							
-	Transportation=	All airports, rail, and bus terminals							
(4)=	E-Commerce Sales Share of Total Retail Sales:	The percent share represented by total U.S. E-commerce dollar sales of total U.S. retail dollar sales							

Key U.S. Commercial Market Measures															
Period	Forecast F.	(1) Corp. Pre-Tax Profits	(2) Office Vacancy Rate	(3) Real Value of Put-In-Place Construction											(4) E-Com. Share of Total Retail
				Total	Lodging	Offices	Retail Stores		Amuse. & Recr.	Health Care	Educ.	Relig.	Public Safety	Transp.	
							Food/Bev. Auto/Other	Multi- Retail							
		(\$ Bns.)	(%)	(09\$Bns.)	(09\$Bns.)	(09\$Bns.)	(09\$Bns.)	(09\$Bns.)	(09\$Bns.)	(09\$Bns.)	(09\$Bns.)	(09\$Bns.)	(09\$Bns.)	(09\$Bns.)	% E-Com./
				SAAR	SAAR	SAAR	SAAR	SAAR	SAAR	SAAR	SAAR	SAAR	SAAR	SAAR	Total
Annual Results:															
2000		781	8.0%	256,082	14,245	61,444	13,107	22,228	20,444	24,781	58,733	8,031	10,049	23,020	0.8%
2001		754	11.1%	250,852	12,115	57,248	12,502	23,527	19,327	23,403	61,888	8,078	9,558	23,207	1.1%
2002		907	14.9%	335,009	15,228	62,169	11,078	21,910	24,301	37,993	103,498	11,704	10,986	36,158	1.3%
2003		1,056	16.6%	321,170	14,646	53,912	11,440	21,074	23,013	40,093	101,620	11,717	9,793	33,862	1.6%
2004		1,283	16.4%	315,771	15,950	54,564	10,630	24,239	21,520	41,477	95,562	10,520	9,033	32,275	2.0%
2005		1,478	14.6%	306,390	15,219	54,357	9,285	26,921	18,097	40,792	94,323	9,177	8,634	29,585	2.4%
2006		1,647	13.3%	323,742	19,916	59,479	8,136	31,995	20,851	42,261	93,419	8,505	8,532	30,648	2.7%
2007		1,529	12.7%	360,715	29,820	67,728	8,280	35,911	21,990	45,422	100,260	7,834	10,544	32,927	3.1%
2008		1,285	13.9%	373,759	35,841	68,471	8,075	32,032	21,877	46,877	104,787	7,236	13,071	35,492	3.5%
2009		1,397	15.4%	325,765	25,558	52,196	4,903	18,548	19,442	44,992	103,485	6,224	13,848	36,568	4.0%
2010		1,746	16.5%	274,580	12,012	39,122	4,732	12,892	17,436	40,616	91,169	5,481	11,552	39,577	4.4%
2011		1,817	16.2%	257,390	9,245	36,443	5,290	13,526	16,259	40,704	85,842	4,302	10,523	35,256	4.7%
2012		1,998	16.0%	255,708	10,682	37,263	5,788	14,801	15,678	43,083	85,744	3,895	10,583	28,215	5.2%
2013		2,033	15.5%	256,859	12,972	36,536	6,326	16,177	14,991	40,111	77,937	3,539	9,371	38,899	5.5%
2014		2,141	15.6%	267,417	15,586	43,377	7,226	18,477	16,136	37,179	76,654	3,257	9,079	40,446	6.4%
2015		2,117	15.6%	284,384	19,997	50,684	7,438	19,019	18,864	36,454	78,939	3,331	7,900	41,758	6.5%
2016		2,073	13.5%	299,511	24,121	60,261	8,064	20,621	20,499	35,331	81,603	3,196	7,287	38,528	6.9%
2017	F	2,180	13.1%	299,713	24,715	64,141	7,832	20,028	20,979	35,156	78,663	2,953	7,075	38,172	7.1%
2018	F	2,376	12.1%	306,739	25,401	68,583	8,229	21,042	21,221	35,466	79,012	2,912	6,969	37,885	-
2019	F	2,487	--	309,071	25,385	70,659	7,760	19,843	21,090	36,119	79,904	2,885	7,009	38,437	-
2020	F	2,557	--	311,711	25,181	71,224	7,944	20,313	20,787	36,160	80,964	2,840	7,011	39,288	-
2021	F	2,651	--	314,858	25,818	70,910	7,969	20,377	20,757	36,648	82,201	2,808	7,100	40,270	-
2022	F	2,743	--	-	-	-	-	-	-	-	-	-	-	-	-

Key U.S. Commercial Measures													
Period	Forecast F	(1)	(2)	(3)									
		Corp. Pre-Tax Profits	Office Vacancy Rate	Real Value of Put-In-Place Construction									
				Total	Lodging	Offices	Retail Stores		Amuse. & Recr.	Health Care	Educ.	Relig.	Public Safety
							Food/Bev. Auto/Other	Multi-Retail					
		(\$ Bns.)	(%)	(09\$ Bns. SAAR)	(09\$ Bns. SAAR)	(09\$ Bns. SAAR)	(09\$ Bns. SAAR)	(09\$ Bns. SAAR)	(09\$ Bns. SAAR)	(09\$ Bns. SAAR)	(09\$ Bns. SAAR)	(09\$ Bns. SAAR)	(09\$ Bns. SAAR)
Quarterly Results:													
2012Q1		2,016	16.0%	260,490	9,747	37,592	5,743	14,912	15,512	42,044	85,418	3,964	10,822
2012Q2		1,984	15.7%	261,681	10,656	36,700	5,714	15,628	15,351	42,848	84,053	3,800	10,417
2012Q3		1,999	16.2%	261,404	10,856	37,412	5,773	14,632	15,325	41,817	83,670	3,766	10,262
2012Q4		1,984	16.1%	256,404	11,457	37,211	5,855	13,421	14,831	40,882	80,102	3,622	9,665
2013Q1		2,000	16.0%	252,213	12,208	35,532	6,621	14,438	14,061	40,080	78,312	3,743	9,213
2013Q2		2,019	15.9%	250,714	12,741	34,753	6,562	14,921	14,276	39,459	76,249	3,553	9,514
2013Q3		2,035	15.1%	252,489	13,336	36,426	6,023	16,275	15,220	38,953	75,924	3,271	8,789
2013Q4		2,078	14.9%	253,822	13,525	39,142	6,375	18,464	14,953	38,088	73,849	3,294	9,062
2014Q1		1,985	15.8%	251,710	14,538	40,881	6,453	18,083	14,245	36,184	71,710	3,176	8,874
2014Q2		2,149	15.8%	261,053	14,640	43,430	6,394	17,591	15,587	36,009	76,063	3,028	8,759
2014Q3		2,197	15.7%	261,780	15,835	43,782	6,848	18,621	15,791	35,667	74,662	3,188	8,816
2014Q4		2,232	14.9%	266,643	17,205	45,161	7,191	18,433	16,526	36,171	73,743	3,202	8,699
2015Q1		2,176	15.1%	266,761	17,818	47,411	6,587	17,574	16,934	35,677	72,462	2,987	7,813
2015Q2		2,175	15.9%	285,969	20,294	52,664	6,789	18,366	18,922	36,692	79,550	3,410	7,705
2015Q3		2,136	15.8%	284,231	21,282	51,170	6,476	18,168	19,218	35,537	79,879	3,480	7,821
2015Q4		1,983	15.5%	275,871	20,409	51,177	6,439	17,404	18,816	35,103	76,253	3,139	7,611
2016Q1		2,041	15.3%	285,624	22,507	54,955	7,232	17,836	19,284	34,806	80,001	3,033	7,255
2016Q2		1,997	12.3%	290,419	24,139	57,212	6,646	18,420	20,491	34,272	80,010	3,304	7,118
2016Q3		2,101	12.9%	297,173	24,806	63,442	7,589	19,012	20,012	35,252	79,749	3,207	6,924
2016Q4		2,155	13.4%	300,942	24,823	64,740	7,628	20,865	20,673	34,236	80,908	2,962	7,290
2017Q1		2,109	13.6%	300,835	24,666	63,318	7,726	20,136	20,939	34,343	82,364	2,847	7,018
2017Q2		2,123	12.7%	295,579	24,528	61,103	7,476	21,445	20,455	34,406	79,046	2,885	6,929
2017Q3		2,206	13.0%	291,922	25,626	59,109	7,023	21,098	20,634	34,865	77,034	2,784	6,960
2017Q4		2,283	--	-	-	-	-	-	-	-	-	-	-
2018Q1		2,299	--	-	-	-	-	-	-	-	-	-	-
2018Q2		2,338	--	-	-	-	-	-	-	-	-	-	-
2018Q3		2,405	--	-	-	-	-	-	-	-	-	-	-
2018Q4		2,480	--	-	-	-	-	-	-	-	-	-	-
Remarks & Notes:													
- All dollar values in US Dollars													
- Quarterly figures are at seasonally adjusted annual rates, unless noted otherwise													
- Quarterly percent change is current quarter versus same quarter prior year, unless noted otherwise													
- Inflation-adjusted "real" values are expressed in constant, chained 2009 US Dollars													
- All actual figures sourced from various U.S. Government sources and forecasts are as per Global Insights, unless noted otherwise													