



FMI's North American Construction Outlook

Second Quarter 2019 Report



FMI U.S. Construction Outlook | Second Quarter 2019 Report

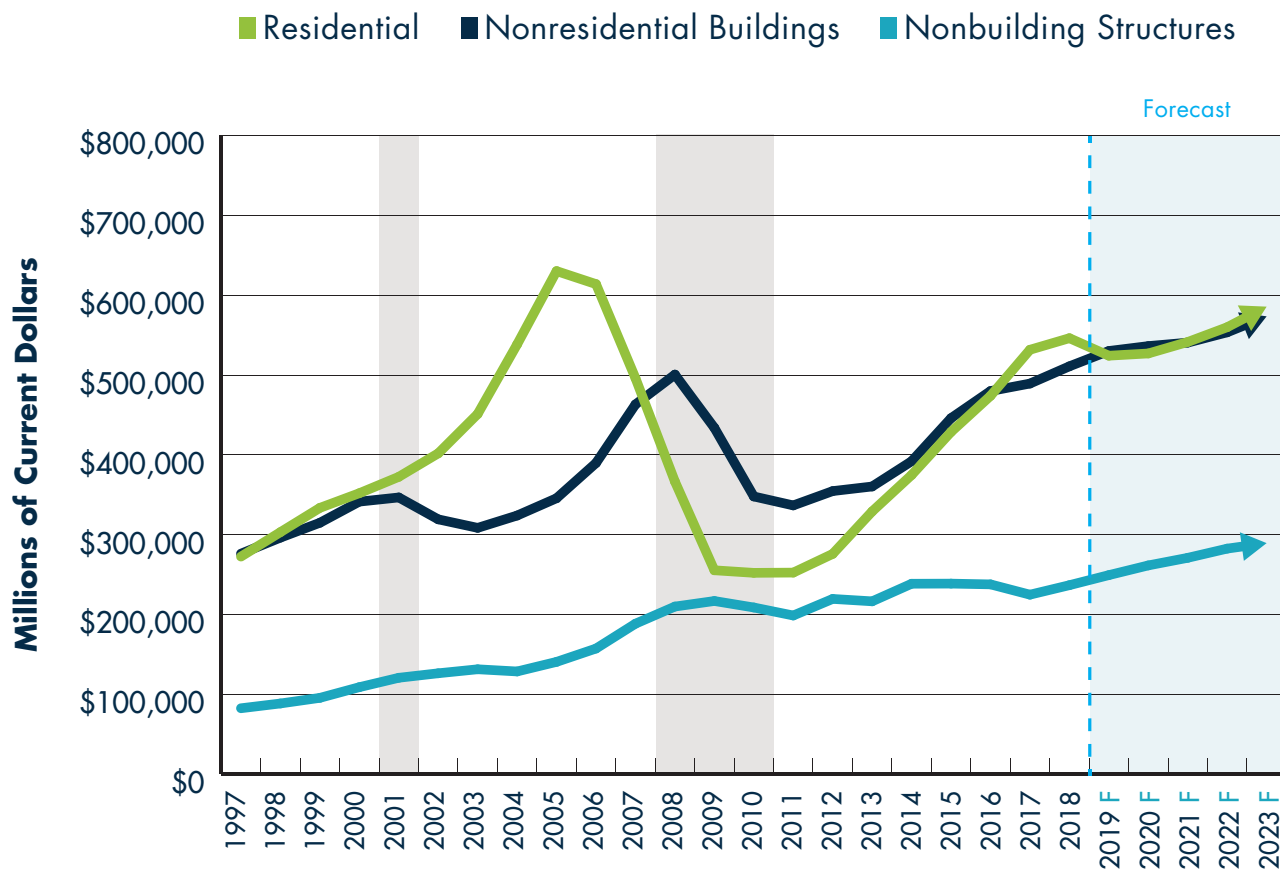
Key Takeaways

- Total engineering and construction spending for the U.S. is forecast to end up 1 percent in 2019, compared to up 4 percent in 2018.



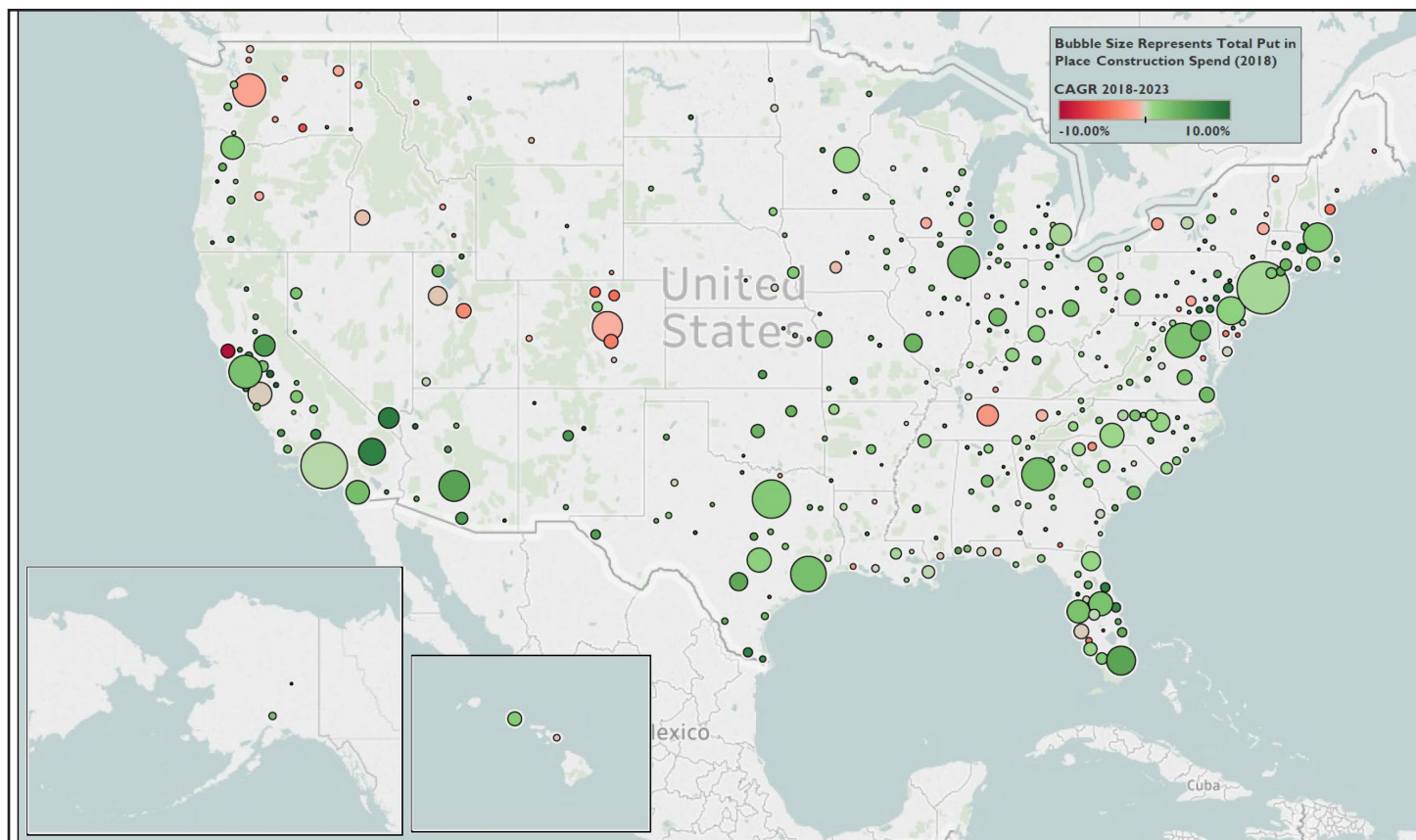
- Spending growth in 2019 is expected to be led by public investment across both nonresidential buildings and nonresidential structures. Current top-performing segments forecast in 2019 include conservation and development (+9 percent), transportation (+8 percent), water supply (+8 percent), public safety (+7 percent), office (+6 percent), and highway and street (+6 percent). Forecast bottom-performing segments in 2019 include religious (-6 percent), single-family residential (-5 percent) and residential improvements (-4 percent).
- Only one segment, sewage and waste disposal, was upgraded into our growth category through the second half of 2019. Conversely, educational and manufacturing have both been downgraded from growth to stable. Last, both single family residential and residential improvements have now been downgraded from stable to down. All three residential segments are now expected to end this year lower than 2018 spending levels.

Total Construction Put in Place Estimated for the U.S.



Source: U.S. Census and FMI Forecast

Total Construction Spending Put in Place 2018 and Forecast Growth (2018-2023 CAGR) by Metropolitan Statistical Area



Source: FMI Forecast

RESIDENTIAL CONSTRUCTION PUT IN PLACE

Single-Family Residential

Drivers: Unemployment rate, core CPI, income, mortgage rate, home prices, housing starts, housing permits

DWN 5%

\$270 Billion

2019/2018 Comparison



- Rising home prices, debt levels and slow wage growth have resulted in significant affordability concerns
- Homebuyers are weary of the current economic climate, with mortgage rates expected to continue a slow decline
- Employment growth has slowed, but remains positive

2019	DWN 5%	\$270 Billion
2020	STA 1%	\$272 Billion
2021	STA 3%	\$280 Billion
2022	STA 3%	\$290 Billion
2023	UP 5%	\$304 Billion

Multifamily Residential

Drivers: Unemployment rate, core CPI, income, mortgage rate, home prices, housing starts, housing permits

DWN 1%

\$66 Billion

2019/2018 Comparison



- New construction activity across several major urban markets appears to have cooled
- Prices continue to rise, but remain mostly attractive and attainable relative to affordability constraints in single-family homes
- Millennial buying practices and urbanization trends continue to drive long-term opportunities

2019	DWN 1%	\$66 Billion
2020	STA 1%	\$66 Billion
2021	STA 3%	\$68 Billion
2022	STA 4%	\$71 Billion
2023	UP 6%	\$75 Billion

Improvements

Drivers: Unemployment rate, core CPI, income, mortgage rate, home prices, housing starts, housing permits

DWN 4%

\$188 Billion

2019/2018 Comparison



- Stalled moving activity expected through 2020
- Labor constraints remain paramount while material price escalation has become mixed
- Rising home prices and wages continue to fuel demand, balanced, however, by higher real estate taxes

2019	DWN 4%	\$188 Billion
2020	STA 0%	\$189 Billion
2021	STA 2%	\$193 Billion
2022	STA 3%	\$199 Billion
2023	STA 4%	\$206 Billion



Nonresidential Construction Index (NRCI) Scores Q1 2011 to Q3 2019

(Scores above 50 indicate expansion; scores below 50 indicate contraction)

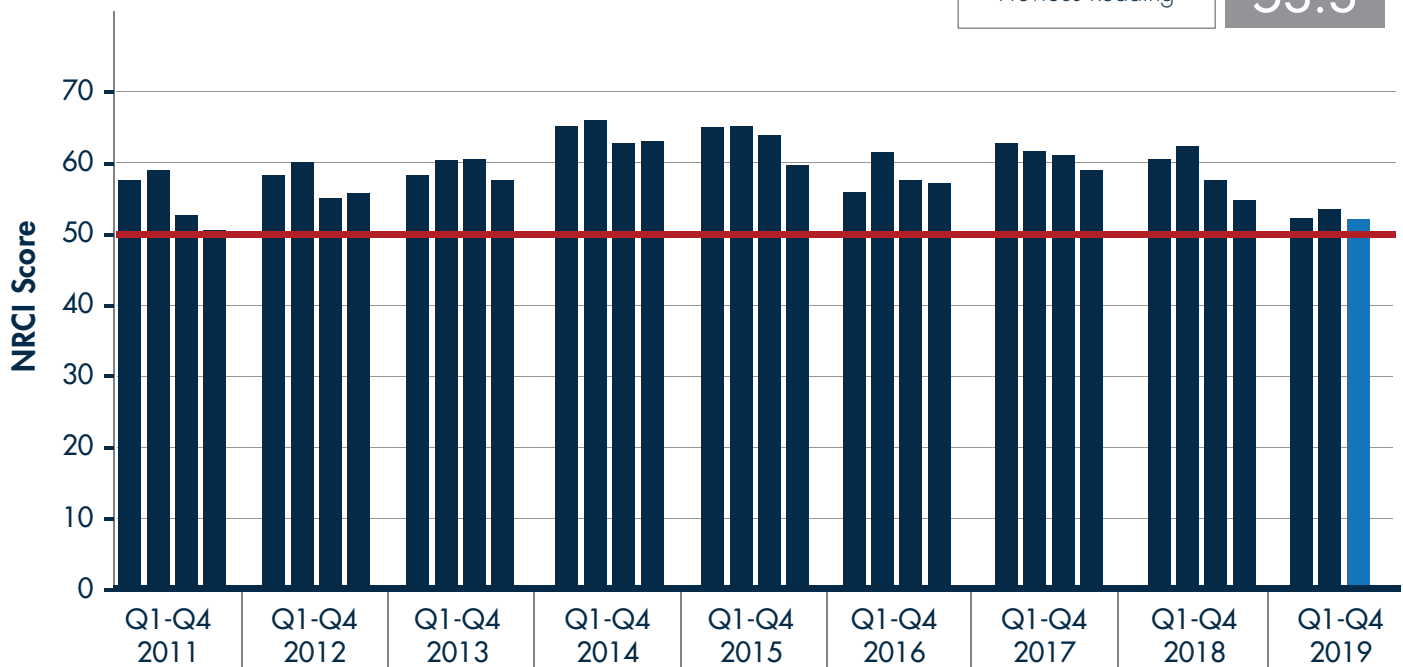
NRCI scores are based on a diffusion index where scores above 50 represent improving or expanding industry conditions, a score of 50 represents conditions remaining the same, and a score below 50 represents worse conditions than last quarter (or contraction).

Current NRCI Reading
for Q3 2019

51.9

Previous Reading

53.3



The data in the NRCI is presented as a sampling of construction industry executives voluntarily serving as panelists for this FMI survey. Responses are based on their experience and opinions, and the analysis is based on FMI's interpretation of the aggregated results.

NONRESIDENTIAL CONSTRUCTION PUT IN PLACE

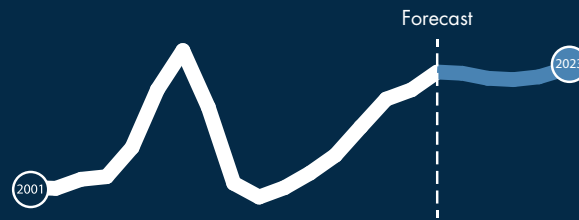
Lodging

Drivers: Occupancy rate, RevPAR, average daily rate, room starts

DWN 1%

\$32 Billion

2019/2018 Comparison



- Business travel, occupancy rates and RevPar expected to remain healthy through 2020
- Recent capacity additions, alongside slower employment growth, will continue to stall investment growth
- Transportation infrastructure projects support elevated spending in select markets
- Competition from nontraditional forms of lodging (e.g., Airbnb)

2019	DWN 1%	\$32 Billion
2020	DWN 3%	\$31 Billion
2021	DWN 1%	\$31 Billion
2022	STA 2%	\$31 Billion
2023	STA 4%	\$32 Billion

Office

Drivers: Office vacancy rate, unemployment rate

UP 6%

\$77 Billion

2019/2018 Comparison



- Shift from major corporate campus projects to public office spending is driving the overall trend
- Widespread labor constraints and slowed employment growth are expected to weigh on future spending
- Demand for data center investment continues to expand rapidly

2019	UP 6%	\$77 Billion
2020	DWN 1%	\$77 Billion
2021	DWN 3%	\$75 Billion
2022	STA 2%	\$76 Billion
2023	UP 5%	\$80 Billion

Commercial

Drivers: Retail sales, CPI, income, home prices, housing starts, housing prices

STA 2%

\$92 Billion

2019/2018 Comparison



- Traditional retail continues to evolve with high, albeit plateaued, vacancy rates and ongoing closures/exits
- Continuing rise in e-commerce led by Amazon, eBay and others
- Renovations assist in upholding annual spending levels
- Demand for warehouse and distribution continues to expand with a shift to last-mile logistics

2019	STA 2%	\$92 Billion
2020	DWN 2%	\$89 Billion
2021	DWN 2%	\$88 Billion
2022	STA 2%	\$90 Billion
2023	UP 5%	\$94 Billion

Health Care

Drivers: Population change, population change in ages 75 and up, uninsured population, government spending, nonresidential structure investment

STA **2%**

\$43 Billion

2019/2018 Comparison



- Ongoing influence of M&A activity, senior living demand from the aging population and specialty care platforms
- “Microhospitals” (eight- to 12-bed facilities) are helping local markets meet demand for acute medical treatment, driving average segment project sizes lower
- New technologies and services expected to temper long-term demand (e.g., telehealth and wearables)

2019	STA 2%
	\$43 Billion
2020	STA 3%
	\$44 Billion
2021	STA 1%
	\$45 Billion
2022	STA 1%
	\$45 Billion
2023	STA 4%
	\$47 Billion

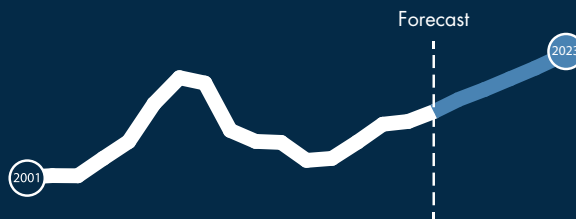
Educational

Drivers: Population change younger than age 18, population change ages 18-24, stock markets, government spending, nonresidential structure investment

STA **4%**

\$98 Billion

2019/2018 Comparison



- K-12 spending growth expected to outpace college/university spending
- Rising tax revenues and local bond support are strengthening public funding sources
- Increasing percentage of the U.S. population under 18 years old

2019	STA 4%
	\$98 Billion
2020	STA 3%
	\$101 Billion
2021	STA 3%
	\$105 Billion
2022	STA 3%
	\$108 Billion
2023	STA 3%
	\$112 Billion

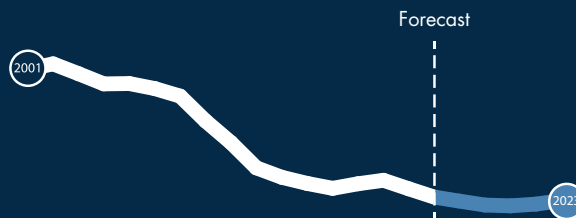
Religious

Drivers: GDP, population, income, personal savings

DWN **6%**

\$3 Billion

2019/2018 Comparison



- Increased wages and income levels bolster industry revenue growth
- Declining share of Americans donating to religious organizations
- Declining attendance over time

2019	DWN 6%
	\$3 Billion
2020	DWN 6%
	\$3 Billion
2021	DWN 1%
	\$3 Billion
2022	STA 3%
	\$3 Billion
2023	UP 5%
	\$3 Billion

Public Safety

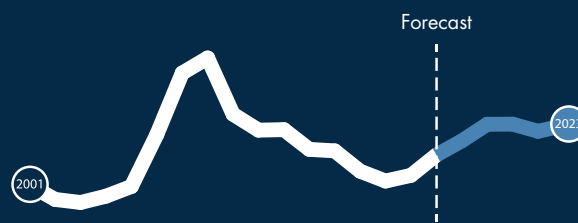
Drivers: Population, government spending, incarceration rate, nonresidential structure investment

UP **7%**

\$10 Billion

2019/2018 Comparison

- Rising tax revenues and local bond support
- High-growth metropolitans are in need of updated facilities and infrastructure
- National crime rates are trending downward



2019	UP 7%	\$10 Billion
2020	UP 8%	\$11 Billion
2021	STA 0%	\$11 Billion
2022	DWN 3%	\$10 Billion
2023	STA 3%	\$11 Billion

Amusement and Recreation

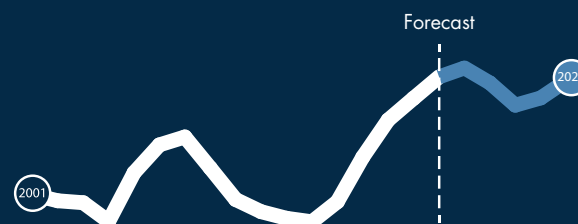
Drivers: Income, personal savings rate, unemployment rate, employment

STA **3%**

\$27 Billion

2019/2018 Comparison

- Rising employment, business travel and transportation infrastructure support increased spending through 2019
- Surge in recent investment is supported by public activity bonds
- Sports and convention centers continue to drive growth through 2019, declines expected thereafter



2019	STA 3%	\$27 Billion
2020	DWN 4%	\$26 Billion
2021	DWN 7%	\$24 Billion
2022	STA 2%	\$25 Billion
2023	UP 5%	\$26 Billion

Transportation

Drivers: Population, government spending, transportation funding

UP **8%**

\$56 Billion

2019/2018 Comparison

- Urbanization is influencing increased demand for connectivity
- Addressing crowding is a means to continue attraction in large, high-growth metropolitans
- The evolution of e-commerce is bolstering large-scale transportation investment nationwide
- Expect strong short-term and midterm growth across the Northeast and Midwest



2019	UP 8%	\$56 Billion
2020	UP 8%	\$60 Billion
2021	UP 6%	\$64 Billion
2022	UP 5%	\$67 Billion
2023	STA 1%	\$67 Billion

Communication

Drivers: Population, security/regulation standards, private investment, innovation/technology investment

STA **3%**

\$25 Billion

2019/2018 Comparison



- Fifth-generation (5G) infrastructure and hardware are being deployed rapidly
- 5G infrastructure requirements are estimated to exceed \$200 billion
- Bandwidth needs remain high, providers are working to bring new capacity online in efforts to keep up with the public demand

2019	STA 3%	\$25 Billion
2020	UP 5%	\$27 Billion
2021	UP 5%	\$28 Billion
2022	STA 3%	\$29 Billion
2023	STA 4%	\$30 Billion

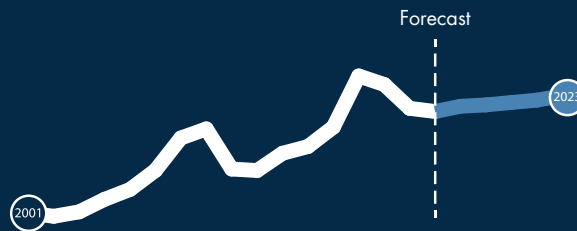
Manufacturing

Drivers: PMI, industrial production, capacity utilization, durable goods orders, manufacturing inventories

STA **3%**

\$67 Billion

2019/2018 Comparison



- International trade negotiations, new tariffs and oil price volatility continue to generate uncertainty
- Increased investment tied to domestic oil and gas production, especially along the Gulf Coast
- Leading indicators suggest a softening/declining trend in industrial production into 2020

2019	STA 3%	\$67 Billion
2020	STA 1%	\$68 Billion
2021	STA 1%	\$69 Billion
2022	STA 1%	\$70 Billion
2023	STA 3%	\$72 Billion

NONBUILDING STRUCTURES CONSTRUCTION PUT IN PLACE

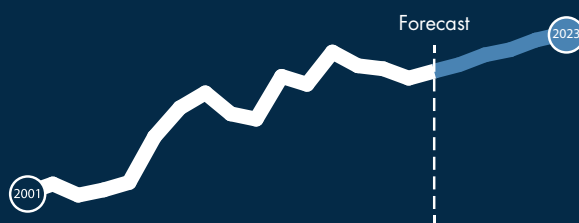
Power

Drivers: Population, industrial production, government spending

STA **3%**

\$104 Billion

2019/2018 Comparison



- Continued shift from coal to natural gas and renewable energy sources
- Various technologies are being implemented to improve processes and the overall customer experience
- Faced with opposition, pipeline activity is to remain active well into 2020
- Trends toward electrification (e.g., electric cars) are increasing infrastructure requirements

2019	STA 3%	\$104 Billion
2020	UP 5%	\$109 Billion
2021	STA 2%	\$111 Billion
2022	STA 4%	\$116 Billion
2023	STA 3%	\$119 Billion

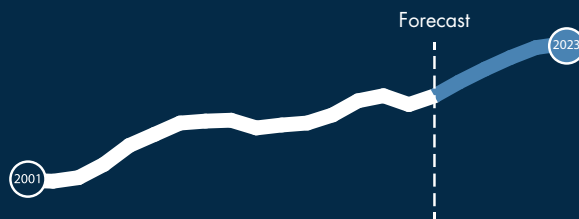
Highway and Street

Drivers: Population, government spending, nonresidential structure investment

UP **6%**

\$99 Billion

2019/2018 Comparison



- Expanding state and local economies have led to increased funding sources
- Overall growth is driven by a handful of the largest states (e.g., California's SB1)
- Upcoming 2020 federal funding rescission could pose major challenges
- Fixing America's Surface Transportation (FAST) Act is set to expire in 2020

2019	UP 6%	\$99 Billion
2020	UP 5%	\$104 Billion
2021	UP 5%	\$109 Billion
2022	STA 4%	\$113 Billion
2023	STA 1%	\$114 Billion

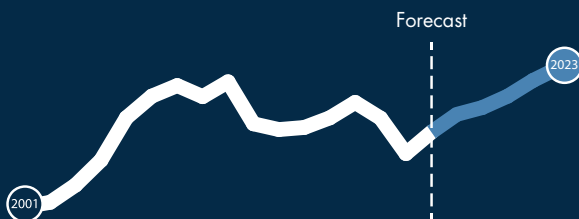
Sewage and Waste Disposal

Drivers: Population, industrial production, government spending

UP **6%**

\$23 Billion

2019/2018 Comparison



- Passage of America's Water Infrastructure Act in late 2018 and reauthorization of the Water Infrastructure Finance and Innovation Act (WIFIA) provide a substantial boost in funding
- Residential needs and technology advancements will drive overall demand

2019	UP 6%	\$23 Billion
2020	STA 2%	\$24 Billion
2021	STA 4%	\$25 Billion
2022	UP 5%	\$26 Billion
2023	STA 4%	\$27 Billion

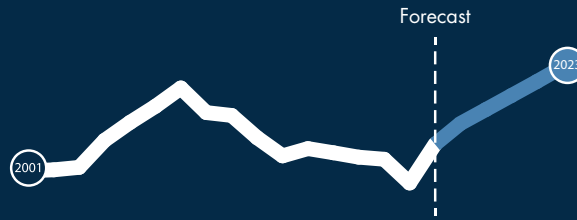
Water Supply

Drivers: Population, industrial production, government spending

UP **8%**

\$15 Billion

2019/2018 Comparison



- Passage of America's Water Infrastructure Act in late 2018 and reauthorization of the Water Infrastructure Finance and Innovation Act (WIFIA) provide a substantial boost in funding
- Introduction of the Water Quality Protection and Jobs Creation Act of 2019 to support further spending
- Significant \$2.75 billion flood control effort in North Dakota represents the first P3 for the U.S. Army Corps of Engineers (USACE)

2019 **UP** **8%**
\$15 Billion

2020 **UP** **5%**
\$16 Billion

2021 **UP** **5%**
\$16 Billion

2022 **STA** **4%**
\$17 Billion

2023 **STA** **4%**
\$18 Billion

Conservation and Development

Drivers: Population, government spending

UP **9%**

\$9 Billion

2019/2018 Comparison



- USACE spending is being aided from various sources, including a recent 2019 disaster relief bill, the 2019 federal spending package and the 2018 Consolidated Appropriations Bill
- Further, albeit mild, EPA cuts realized in proposed 2020 budget

2019 **UP** **9%**
\$9 Billion

2020 **UP** **6%**
\$10 Billion

2021 **STA** **4%**
\$10 Billion

2022 **STA** **4%**
\$10 Billion

2023 **UP** **6%**
\$11 Billion

Construction Put in Place Estimated for the United States

Millions of Current Dollars

2nd Quarter 2019 Forecast (based on Q1 2019 Actuals)

	2014	2015	2016	2017	2018	2019E	2020F	2021F	2022F	2023F
RESIDENTIAL BUILDINGS										
Single-family	194,091	221,680	242,938	270,338	284,222	270,231	271,785	280,093	289,508	304,024
Multifamily	46,250	58,228	67,084	66,354	66,267	65,700	66,366	68,333	71,399	75,477
Improvements*	134,519	148,854	163,911	194,965	195,684	188,288	188,866	192,977	198,975	206,153
Total Residential Buildings	374,860	428,762	473,933	531,657	546,173	524,219	527,018	541,403	559,882	585,654
NONRESIDENTIAL BUILDINGS										
Lodging	16,738	21,908	26,969	28,672	31,902	31,669	30,759	30,518	31,017	32,409
Office	46,582	55,521	67,616	66,850	72,915	77,318	76,662	74,523	75,885	79,781
Commercial	62,841	65,899	78,151	87,733	89,514	91,535	89,491	88,147	90,207	94,274
Health Care	38,647	39,147	40,157	41,916	42,009	42,921	44,145	44,784	45,264	46,961
Educational	79,681	84,771	90,348	91,213	94,256	98,157	101,190	104,533	107,889	111,577
Religious	3,386	3,577	3,721	3,366	3,021	2,852	2,690	2,658	2,729	2,876
Public Safety	9,437	8,484	8,023	8,290	9,243	9,905	10,682	10,687	10,354	10,621
Amusement and Recreation	16,773	20,258	23,155	24,851	26,518	27,215	26,047	24,308	24,874	26,210
Transportation	42,043	44,843	43,274	45,173	51,782	55,903	60,174	63,817	66,696	67,203
Communication	17,298	21,696	22,178	24,831	24,634	25,372	26,547	27,744	28,709	29,913
Manufacturing	58,648	79,930	76,380	66,448	65,133	67,301	67,878	68,882	69,857	71,681
Total Nonresidential Buildings	392,074	446,034	479,972	489,343	510,927	530,149	536,266	540,601	553,481	573,506
NONBUILDING STRUCTURES										
Power	110,089	102,972	101,389	96,513	100,152	103,587	108,657	111,329	116,333	119,382
Highway and Street	84,743	90,626	92,738	89,053	92,642	98,567	103,861	108,665	112,784	114,286
Sewage and Waste Disposal	23,173	24,380	23,149	20,386	22,058	23,447	23,978	24,867	26,097	27,079
Water Supply	13,380	13,150	13,042	11,806	13,822	14,904	15,628	16,355	17,083	17,834
Conservation and Development	7,310	7,726	7,588	7,244	8,211	8,986	9,512	9,929	10,372	10,980
Total Nonbuilding Structures	238,695	238,854	237,906	225,002	236,885	249,492	261,636	271,146	282,669	289,561
Total Put in Place	\$1,005,629	\$1,113,650	\$1,191,811	\$1,246,002	\$1,293,985	\$1,303,860	\$1,324,920	\$1,353,150	\$1,396,033	\$1,448,721

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

Construction Put in Place Estimated for the United States

Change From Prior Year - Current Dollar Basis

2nd Quarter 2019 Forecast (based on Q1 2019 Actuals)

	2014	2015	2016	2017	2018	2019E	2020F	2021F	2022F	2023F
RESIDENTIAL BUILDINGS										
Single-family	13%	14%	10%	11%	5%	-5%	1%	3%	3%	5%
Multifamily	32%	26%	15%	-1%	0%	-1%	1%	3%	4%	6%
Improvements*	10%	11%	10%	19%	0%	-4%	0%	2%	3%	4%
Total Residential Buildings	14%	14%	11%	12%	3%	-4%	1%	3%	3%	5%
NONRESIDENTIAL BUILDINGS										
Lodging	24%	31%	23%	6%	11%	-1%	-3%	-1%	2%	4%
Office	23%	19%	22%	-1%	9%	6%	-1%	-3%	2%	5%
Commercial	18%	5%	19%	12%	2%	2%	-2%	-2%	2%	5%
Health Care	-5%	1%	3%	4%	0%	2%	3%	1%	1%	4%
Educational	1%	6%	7%	1%	3%	4%	3%	3%	3%	3%
Religious	-6%	6%	4%	-10%	-10%	-6%	-6%	-1%	3%	5%
Public Safety	-1%	-10%	-5%	3%	11%	7%	8%	0%	-3%	3%
Amusement and Recreation	10%	21%	14%	7%	7%	3%	-4%	-7%	2%	5%
Transportation	7%	7%	-3%	4%	15%	8%	8%	6%	5%	1%
Communication	-3%	25%	2%	12%	-1%	3%	5%	5%	3%	4%
Manufacturing	16%	36%	-4%	-13%	-2%	3%	1%	1%	1%	3%
Total Nonresidential Buildings	9%	14%	8%	2%	4%	4%	1%	1%	2%	4%
NONBUILDING STRUCTURES										
Power	18%	-6%	-2%	-5%	4%	3%	5%	2%	4%	3%
Highway and Street	4%	7%	2%	-4%	4%	6%	5%	5%	4%	1%
Sewage and Waste Disposal	3%	5%	-5%	-12%	8%	6%	2%	4%	5%	4%
Water Supply	-2%	-2%	-1%	-9%	17%	8%	5%	5%	4%	4%
Conservation and Development	23%	6%	-2%	-5%	13%	9%	6%	4%	4%	6%
Total Nonbuilding Structures	10%	0%	0%	-5%	5%	5%	5%	4%	4%	2%
Total Put in Place	11%	11%	7%	5%	4%	1%	2%	2%	3%	4%

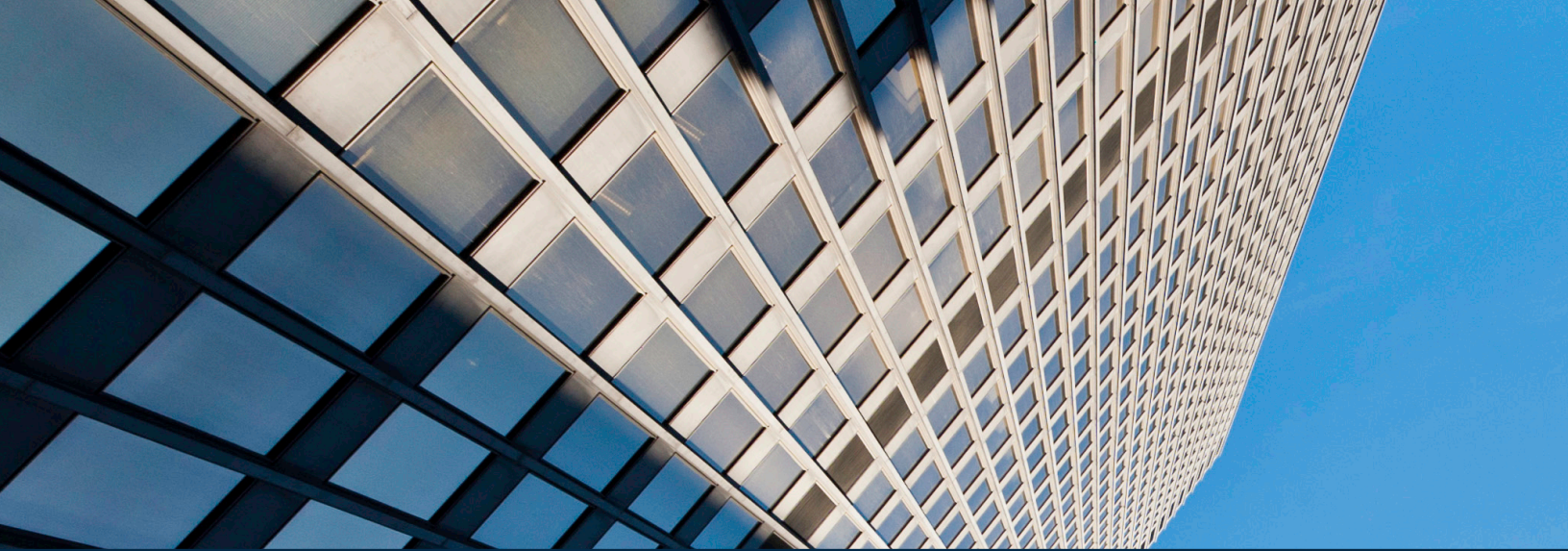
*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



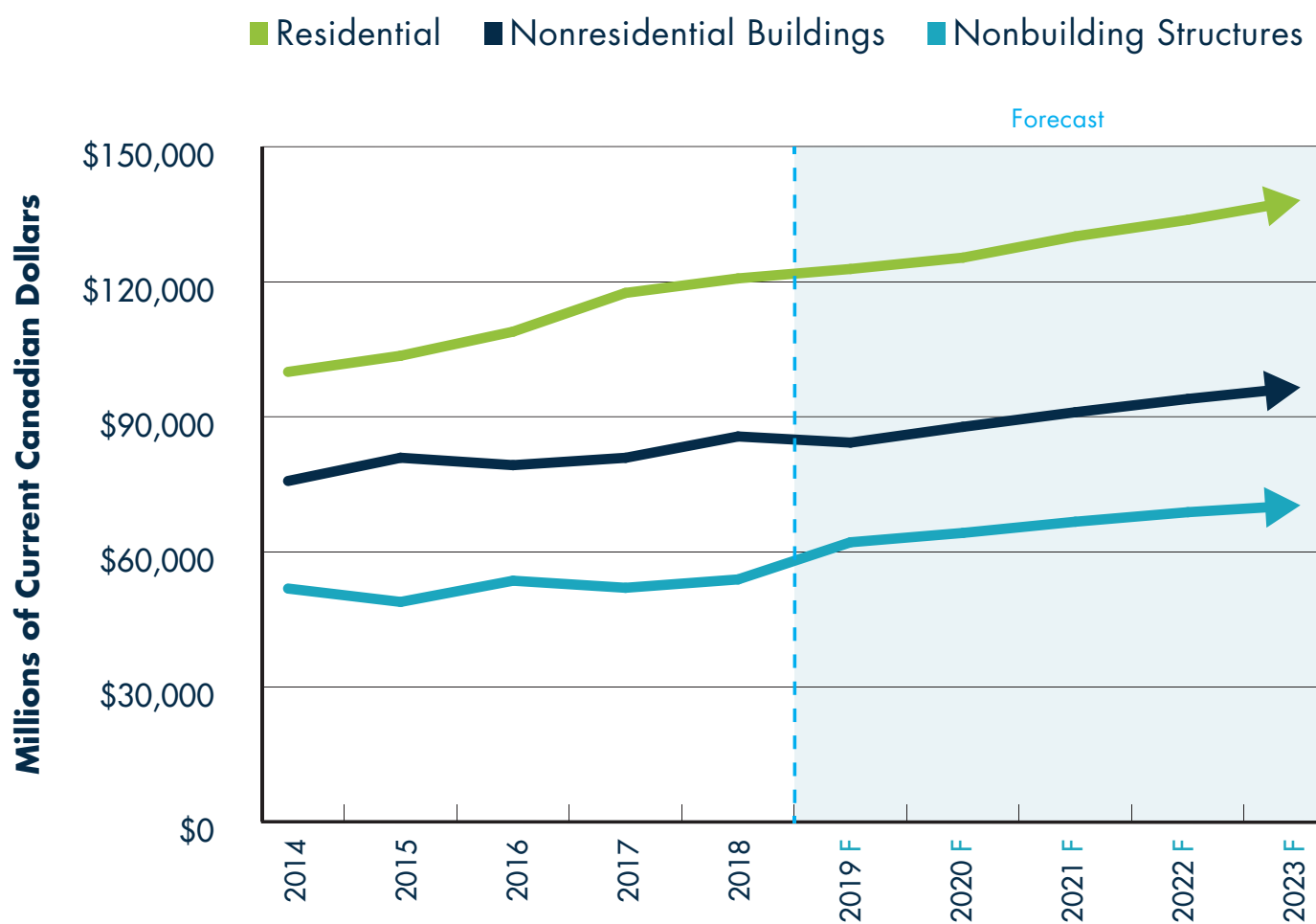
FMI Canadian Construction Outlook Second Quarter 2019 Report

2019 Construction Segment Performance 2019/2018 Comparison

UP 5% or more	STABLE 0% to 4%	DOWN Under 0%
Up		
<ul style="list-style-type: none"> ▪ Multifamily ▪ Lodging ▪ Office 		
UP 5% or more	STABLE 0% to 4%	DOWN Under 0%
Stable		
<ul style="list-style-type: none"> ▪ Single-family ▪ Residential Improvements ▪ Commercial ▪ Religious ▪ Public Safety ▪ Transportation ▪ Communication ▪ Manufacturing ▪ Power ▪ Highway & Street ▪ Conservation & Development 		
UP 5% or more	STABLE 0% to 4%	DOWN Under 0%
Down		
<ul style="list-style-type: none"> ▪ Health care ▪ Educational ▪ Amusement & Recreation ▪ Sewage & Waste Disposal ▪ Water Supply 		

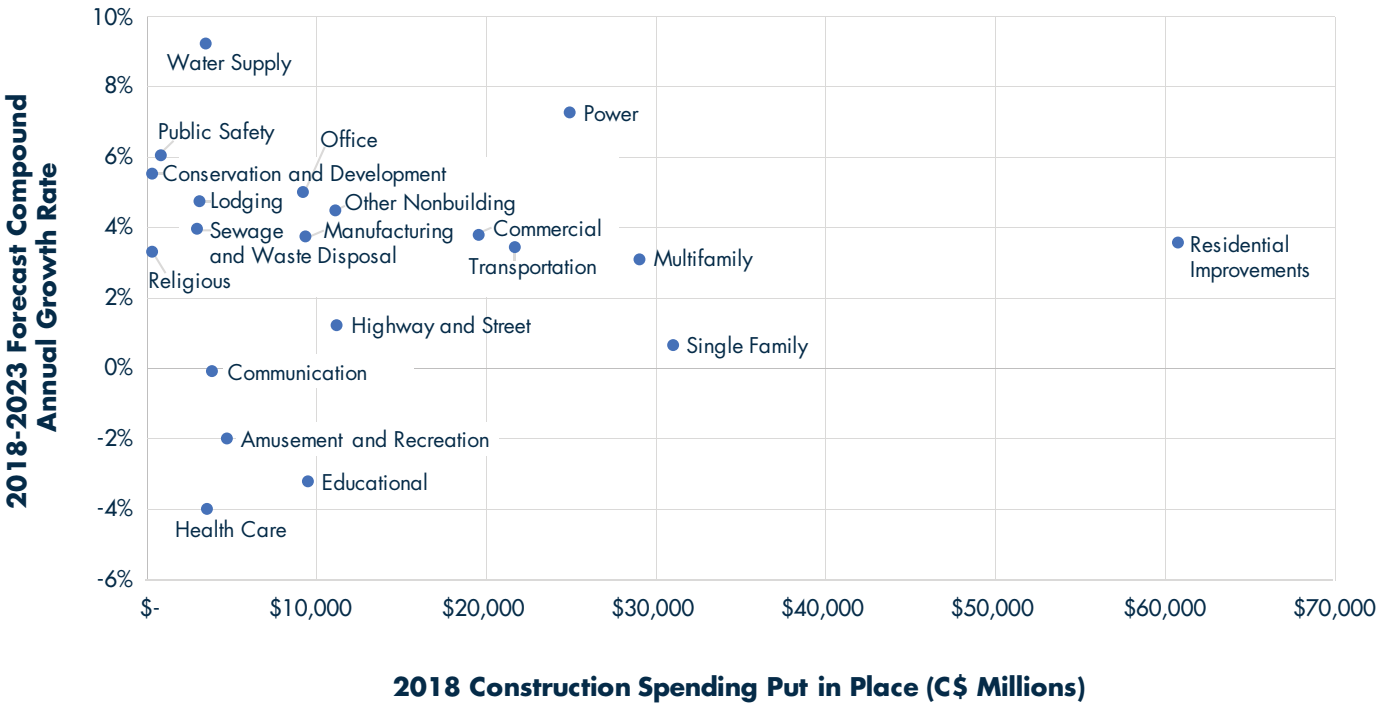


Total Construction Put in Place Estimated for Canada





Total Construction Put in Place Estimated for Canada



Construction Put in Place Estimated for Canada

Millions of Current Canadian Dollars

2nd Quarter 2019 Forecast (based on Q1 2019 Actuals)

	2014	2015	2016	2017	2018	2019E	2020F	2021F	2022F	2023F
RESIDENTIAL BUILDINGS										
Single-family	26,398	25,945	27,599	30,377	30,984	29,813	31,049	31,256	31,370	32,019
Multifamily	21,802	24,235	26,146	28,195	29,041	29,508	28,511	30,838	32,136	33,768
Improvements*	51,770	53,373	55,163	58,946	60,714	63,515	65,795	67,993	70,251	72,344
Total Residential Buildings	99,970	103,552	108,908	117,517	120,739	122,836	125,354	130,087	133,756	138,131
NONRESIDENTIAL BUILDINGS										
Lodging	2,487	3,113	3,177	2,998	3,088	3,118	3,235	3,550	3,711	3,886
Office	9,214	10,092	9,050	8,817	9,169	9,280	10,750	10,553	10,785	11,702
Commercial	17,913	18,904	18,505	18,456	19,564	19,944	20,625	21,924	22,827	23,525
Health Care	3,694	3,124	2,557	3,492	3,544	3,354	3,361	3,289	3,113	2,892
Educational	6,460	7,585	8,373	8,641	9,505	8,055	8,068	8,113	8,131	8,073
Religious	327	324	320	323	340	345	355	375	388	400
Public Safety	699	964	975	793	809	897	982	1,013	1,051	1,084
Amusement and Recreation	3,350	3,772	4,257	4,520	4,701	3,985	4,255	4,251	4,278	4,249
Transportation	19,444	20,445	20,698	20,477	21,705	22,042	22,803	24,159	25,161	25,685
Communication	3,264	3,548	2,747	3,373	3,845	3,413	3,432	3,489	3,691	3,827
Manufacturing	8,875	9,015	8,583	8,985	9,345	9,821	9,890	10,290	10,826	11,214
Total Nonresidential Buildings	75,728	80,885	79,242	80,875	85,614	84,255	87,755	91,008	93,964	96,536
NONBUILDING STRUCTURES										
Power	26,731	26,402	28,245	25,385	24,878	28,690	30,509	32,262	34,012	35,316
Highway and Street	8,080	8,207	9,493	10,179	11,146	11,460	11,268	11,522	11,723	11,846
Sewage and Waste Disposal	2,857	2,503	2,600	2,787	2,955	3,554	3,563	3,539	3,596	3,584
Water Supply	5,890	2,882	3,026	3,154	3,438	5,502	5,631	5,714	5,474	5,334
Conservation and Development	176	651	707	305	338	381	405	413	426	443
Other Nonbuilding Structures	8,080	8,207	9,493	10,179	11,095	12,518	12,808	13,221	13,562	13,807
Total Nonbuilding Structures	51,815	48,851	53,563	51,989	53,849	62,105	64,183	66,671	68,792	70,330
Total Put in Place	\$227,513	\$233,288	\$241,713	\$250,380	\$260,202	\$269,196	\$277,292	\$287,766	\$296,512	\$304,996

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

Construction Put in Place Estimated for Canada

Millions of Current Canadian Dollars

2nd Quarter 2019 Forecast (based on Q1 2019 Actuals)

	2014	2015	2016	2017	2018	2019E	2020F	2021F	2022F	2023F
RESIDENTIAL BUILDINGS										
Single-family	2%	-2%	6%	10%	2%	-4%	4%	1%	0%	2%
Multifamily	1%	11%	8%	8%	3%	2%	-3%	8%	4%	5%
Improvements*	7%	3%	3%	7%	3%	5%	4%	3%	3%	3%
Total Residential Buildings	4%	4%	5%	8%	3%	2%	2%	4%	3%	3%
NONRESIDENTIAL BUILDINGS										
Lodging	11%	25%	2%	-6%	3%	1%	4%	10%	5%	5%
Office	2%	10%	-10%	-3%	4%	1%	16%	-2%	2%	8%
Commercial	7%	6%	-2%	0%	6%	2%	3%	6%	4%	3%
Health Care	-12%	-15%	-18%	37%	1%	-5%	0%	-2%	-5%	-7%
Educational	5%	17%	10%	3%	10%	-15%	0%	1%	0%	-1%
Religious	11%	-1%	-1%	1%	5%	2%	3%	6%	4%	3%
Public Safety	-13%	38%	1%	-19%	2%	11%	9%	3%	4%	3%
Amusement and Recreation	-17%	13%	13%	6%	4%	-15%	7%	0%	1%	-1%
Transportation	3%	5%	1%	-1%	6%	2%	3%	6%	4%	2%
Communication	95%	9%	-23%	23%	14%	-11%	1%	2%	6%	4%
Manufacturing	0%	2%	-5%	5%	4%	5%	1%	4%	5%	4%
Total Nonresidential Buildings	4%	7%	-2%	2%	6%	-2%	4%	4%	3%	3%
NONBUILDING STRUCTURES										
Power	10%	-1%	7%	-10%	-2%	15%	6%	6%	5%	4%
Highway and Street	-3%	2%	16%	7%	10%	3%	-2%	2%	2%	1%
Sewage and Waste Disposal	-3%	-12%	4%	7%	6%	20%	0%	-1%	2%	0%
Water Supply	-8%	-51%	5%	4%	9%	60%	2%	1%	-4%	-3%
Conservation and Development	-4%	270%	8%	-57%	11%	13%	6%	2%	3%	4%
Other Nonbuilding Structures	-3%	2%	16%	7%	9%	13%	2%	3%	3%	2%
Total Nonbuilding Structures	3%	-6%	10%	-3%	4%	15%	3%	4%	3%	2%
Total Put in Place	4%	3%	4%	4%	4%	3%	3%	4%	3%	3%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

About the Authors



Jay Bowman is a principal with FMI. Jay assists a broad range of stakeholders in the construction industry, from program managers and general contractors to specialty trades and materials producers, with the identification and assessment of the risks influencing the strategic and tactical decisions they face. In this role, Jay's primary responsibilities include research design and interpretation, based on developing an understanding of the context within which these organizations operate. Jay can be reached at jbowman@fminet.com.



Brian Strawberry is a senior economist with FMI. Brian's expertise is in economic and statistical modeling. He leads FMI's efforts in market sizing, forecasting, and building product/construction material pricing and consumption trends. The combination of Brian's analytical skills and creative problem-solving abilities has proven valuable for many contractors, owners and private equity groups as well as industry associations and internal research initiatives. Brian can be reached at bstrawberry@fminet.com.



for the Built Environment

Denver 210 University Boulevard Suite 800 Denver, CO 80206 303.377.4740	Edmonton Edmonton, AB 780.850.2693	Houston 1301 McKinney Street Suite 2000 Houston, TX 77010 713.936.5400	Phoenix 7639 East Pinnacle Peak Road Suite 100 Scottsdale, AZ 85255 602.381.8108	Raleigh (headquarters) 223 S. West Street Suite 1200 Raleigh, NC 27603 919.787.8400	Tampa 308 South Boulevard Tampa, FL 33606 813.636.1364
--	---	---	---	--	--