

Winter 2024 (Published: December 2024)

U.S. Put-in-Place Construction Forecasts

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Michael Guckes

Michael Guckes has over 20-years of economics experience including 8-years in civil construction and 6-years in manufacturing. During these years he spent 5 as Chief Economist. In 2022 Michael joined ConstructConnect's economics team, shifting his focus to the nonresidential and civil construction markets. He received his BA in economics and political science from Kenyon College and his MBA from The Ohio State University.

Quarterly U.S. Put-in-Place Construction Forecast Report, Winter 2024

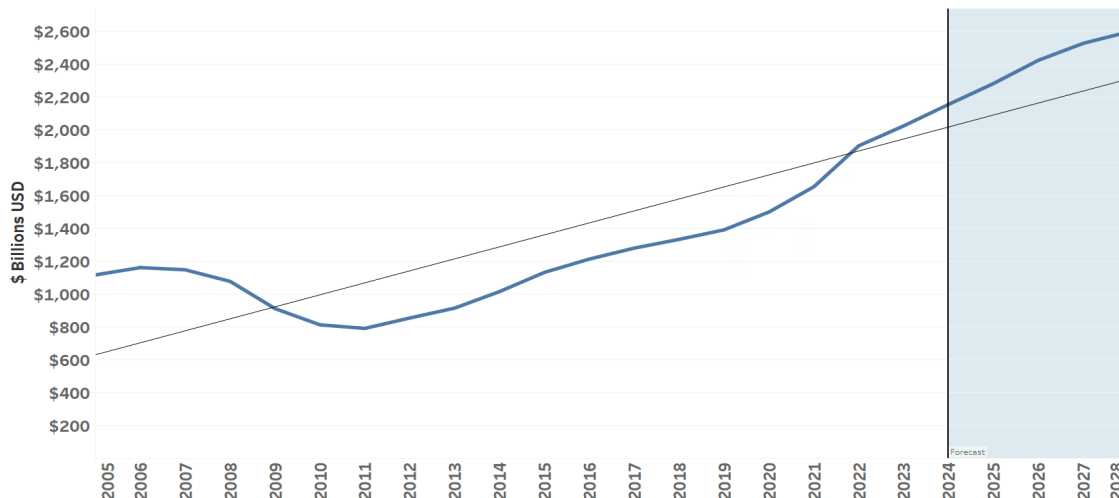
Put-in-Place construction for the full year 2024 is expected to total \$2.15 trillion. The latest estimate represents an increase of 6.4% from 2023 and is only negligibly lower than last quarter's estimate of \$2.16 trillion.

Since the COVID pandemic, several construction trends have had a dramatic impact on the sector's growth and prospects. These include government stimulus spending, private industry's response to changes in international supply chains, and the electrification of the economy among others. Over the past 2 years, ConstructConnect's construction starts results have reflected a surge in spending across heavy engineering, industrial, and power infrastructure categories in part because of these trends.

Additionally, each of these trends brought with it a wave of new

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Graph 1: U.S. Grand Total Construction Spending Put-in-place (PIP) Investment



Graph includes a 'best fit' linear trend line.

Source of actuals: U.S. Census Bureau/Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

'Starts' versus Put-in-place (PIP) Statistics

'Starts' compile the total estimated dollar value of all projects on which ground is broken in any given month. By way of contrast, put-in-place capital spending statistics are analogous to work-in-progress payments as the building of structures proceeds to completion.

Consider a \$100 million mixed use complex for which ground is broken in June 2024. For the 'starts' series, the entire estimated value (\$100 million) will be entered in June 2024. In PIP numbers, it will be captured as spending of approximately \$25 million in 2024; \$60 million in 2025; and the final \$15 million in 2026.

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“megaprojects” - projects valued at more than \$1 billion. Over the last 12 months for which data are available, these megaprojects have amounted to over 18% of all nonresidential construction dollars. This is a significant increase from just 5 years ago when megaprojects accounted for closer to 10% of all such spending. Due to their larger size and longer time to completion, the increased frequency of megaprojects means the put-in-place results over the coming years will be significantly higher than in the past for the above-mentioned categories.

Nowhere has the impact of these trends had more influence than in the industrial market. Industrial starts spending more than doubled from \$66 billion in 2021 to \$151 billion and \$133 billion in the two years that would follow. As a result, ConstructCon-

nect expects owners and developers to transfer record levels of capital to their construction partners as this work is completed between 2024 and 2028. By year-end 2024, we expect industrial put-in-place spending to achieve a record of \$232 billion. In the years to come the value of work put-in-place for industrial construction will only slowly decline, ending 2028 at \$208 billion, more than twice the level of installed work in 2021.

In response to the electrification of the economy, our forecast expects substantial growth in installed power generation and infrastructure construction through 2028. Our 2025 forecast is for a record \$150 billion in installed construction. Thereafter the annual pace of installed construction will accelerate in each successive year, climaxing at \$245 billion in 2028.

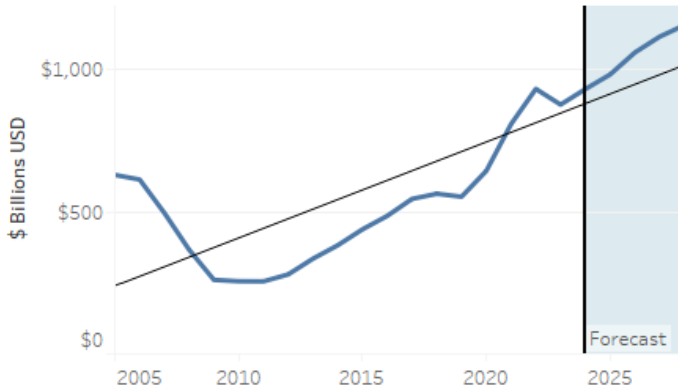
Table 1: U.S. Construction Spending (put-in-place investment)
(billions of “current” \$s)

Type of Construction:	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Grand Total	1,902.7	2,023.7	2154.6	2281.7	2423.1	2526.4	2595.4
(year vs previous year)	15.1%	6.4%	6.5%	5.9%	6.2%	4.3%	2.7%
Total Residential	932.8	877.6	932.2	983.5	1060.9	1116.6	1157.0
	15.3%	-5.9%	6.2%	5.5%	7.9%	5.3%	3.6%
Total Non-residential	970.0	1,146.1	1222.4	1298.2	1362.2	1409.8	1438.4
	14.9%	18.2%	6.7%	6.2%	4.9%	3.5%	2.0%
Total Commercial/for Lease	247.1	265.4	251.2	267.9	285.5	296.8	303.8
	19.7%	7.4%	-5.3%	6.6%	6.6%	3.9%	2.4%
Lodging	20.2	24.7	23.4	25.5	28.8	31.8	34.1
	6.1%	22.3%	-5.3%	8.9%	12.7%	10.6%	7.3%
Office	95.4	99.0	101.0	106.2	108.6	109.7	110.7
	6.1%	3.8%	2.0%	5.2%	2.2%	1.0%	0.9%
Commercial (retail/warehouse)	131.5	141.7	126.9	136.2	148.2	155.3	159.0
	35.0%	7.8%	-10.5%	7.4%	8.8%	4.8%	2.4%
Total Institutional	208.6	240.1	259.4	266.8	273.7	280.7	286.7
	7.3%	15.1%	8.1%	2.8%	2.6%	2.6%	2.1%
Health Care	58.1	65.4	68.0	70.8	74.0	77.0	80.7
	15.4%	12.6%	3.9%	4.1%	4.5%	4.1%	4.8%
Educational	104.0	120.2	128.4	131.1	133.5	135.9	137.0
	3.0%	15.6%	6.8%	2.1%	1.8%	1.8%	0.9%
Religious	3.2	3.8	4.0	3.7	3.7	3.8	3.8
	2.8%	19.3%	4.5%	-7.1%	0.8%	1.0%	1.2%
Public Safety	11.7	14.4	19.0	19.5	18.9	18.7	18.5
	-8.7%	22.9%	32.0%	2.5%	-2.9%	-1.4%	-0.8%
Amusement and Recreation	31.5	36.2	40.1	41.7	43.5	45.4	46.6
	16.3%	14.8%	10.7%	4.0%	4.4%	4.3%	2.6%
Total Engineering/Civil	389.2	447.0	480.0	540.1	586.7	618.2	639.7
(year vs previous year)	7.6%	14.8%	7.4%	12.5%	8.6%	5.4%	3.5%
Transportation	60.9	65.2	68.9	77.3	82.9	87.0	89.6
	3.1%	7.1%	5.6%	12.2%	7.2%	4.9%	3.0%
Communication	24.4	28.0	28.7	32.3	35.0	35.8	36.8
	5.5%	14.9%	2.4%	12.8%	8.2%	2.3%	2.8%
Power	121.6	134.0	150.2	186.5	212.8	231.9	245.0
	2.1%	10.2%	12.1%	24.2%	14.1%	9.0%	5.7%
Highway and Street	115.7	138.1	142.8	151.1	162.1	168.4	171.6
	11.9%	19.4%	3.4%	5.8%	7.3%	3.9%	1.9%
Water Supply & Waste Disposal	57.3	69.9	77.7	80.2	80.9	81.9	83.4
	16.7%	22.0%	11.1%	3.2%	0.9%	1.3%	1.8%
Conservation and Development	9.4	11.7	11.8	12.7	13.1	13.2	13.3
	18.7%	24.8%	0.8%	7.6%	2.7%	1.3%	0.6%
Total Industrial/Manufacturing	125.0	193.6	231.7	223.4	216.3	214.1	208.2
	52.4%	54.9%	19.7%	-3.6%	-3.2%	-1.0%	-2.7%

Current means not adjusted for inflation.

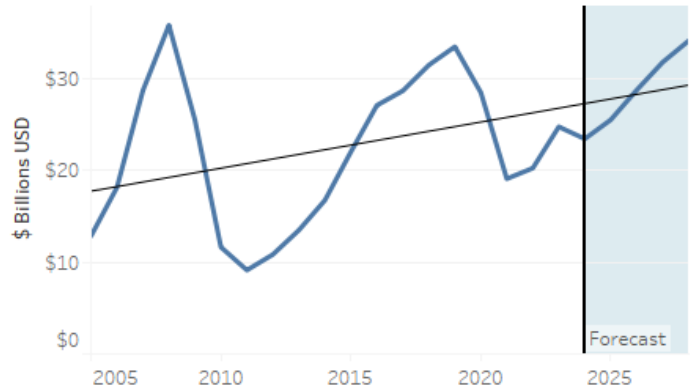
Source of actuals: U.S. Census Bureau/Forecasts: Oxford Economics and ConstructConnect/Table: ConstructConnect.

Graph 2: U.S. Construction Spending: Residential Put-in-place (PIP) Investment



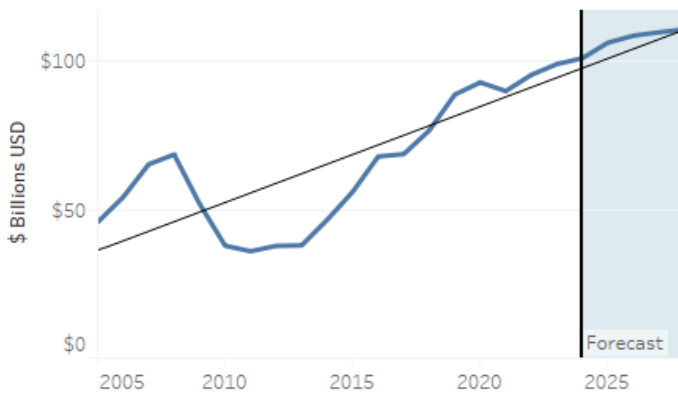
Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graph 3: U.S. Construction Spending: Lodging Put-in-place (PIP) Investment



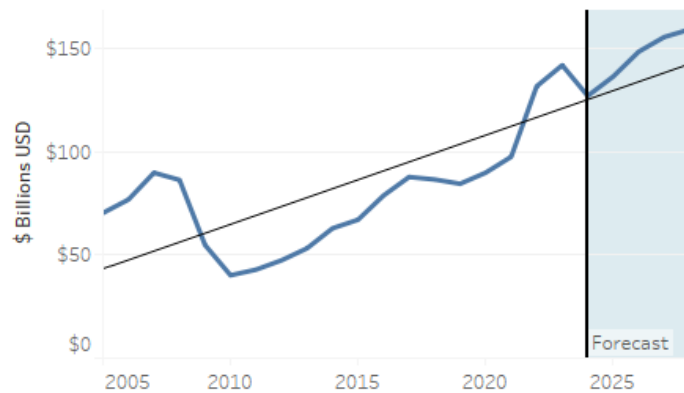
Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graph 4: U.S. Construction Spending: Office Buildings Put-in-place (PIP) Investment



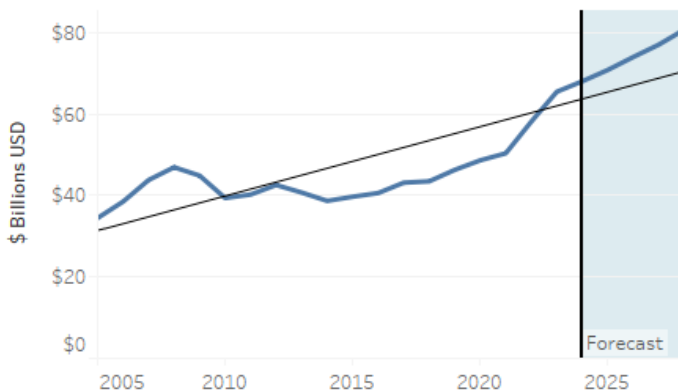
Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graph 5: U.S. Construction Spending: Retail, Warehouse, Restaurant Put-in-place (PIP) Investment



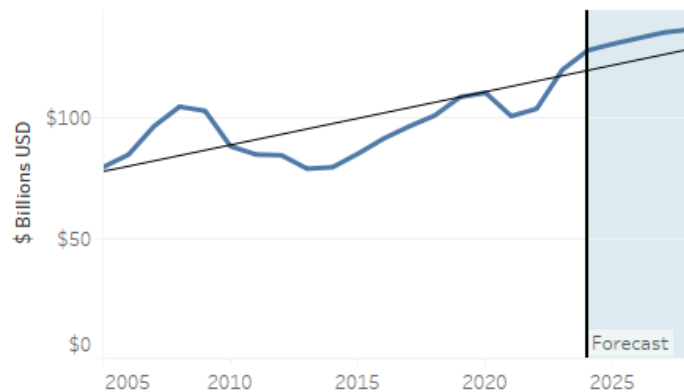
Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graph 6: U.S. Construction Spending: Health Care Put-in-place (PIP) Investment



Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graph 7: U.S. Construction Spending: Educational Put-in-place (PIP) Investment

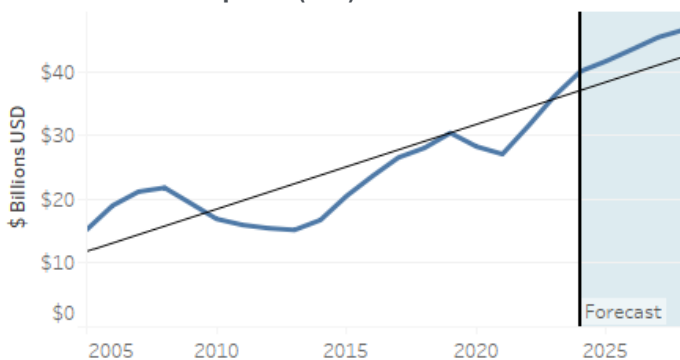


Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graphs include a 'best fit' linear trend line.

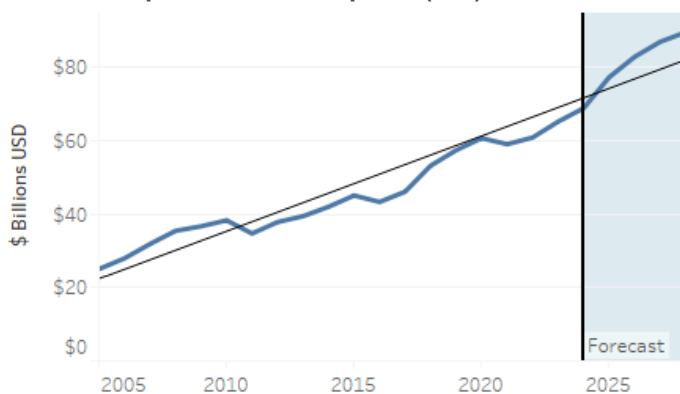
Source of actuals: U.S. Census Bureau/Forecasts: Oxford Economics and ConstructConnect/Charts: ConstructConnect.

Graph 8: U.S. Construction Spending: Amusement and Recreation Put-in-place (PIP) Investment



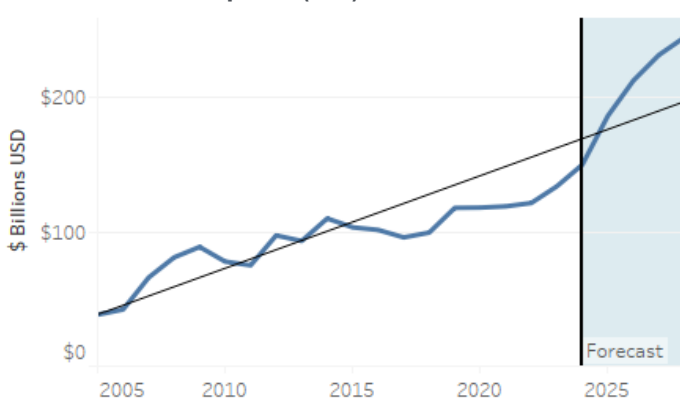
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Chart: ConstructConnect

Graph 9: U.S. Construction Spending: Transportation Put-in-place (PIP) Investment



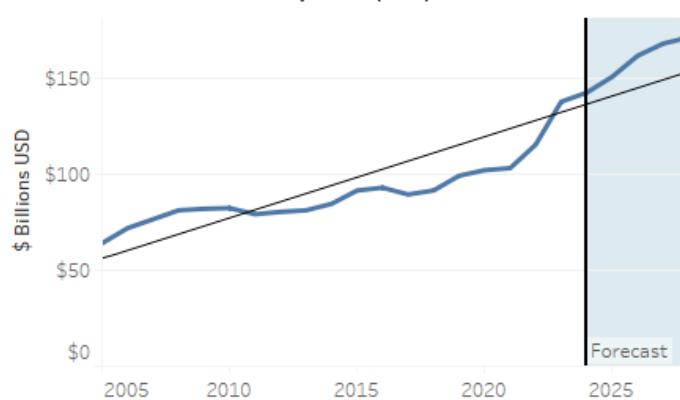
Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
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Graph 10: U.S. Construction Spending: Power Put-in-place (PIP) Investment



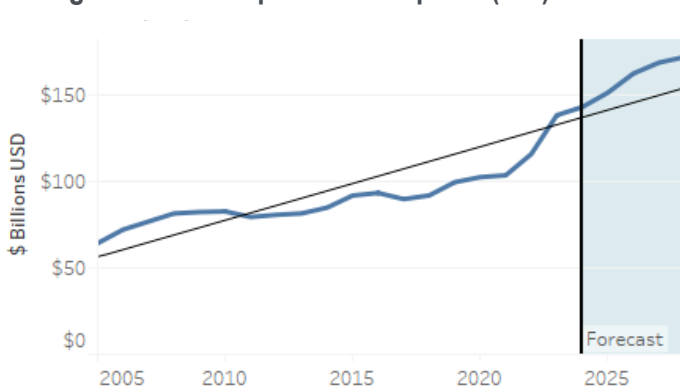
Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graph 11: U.S. Construction Spending: Highways and Streets Put-in-place (PIP) Investment



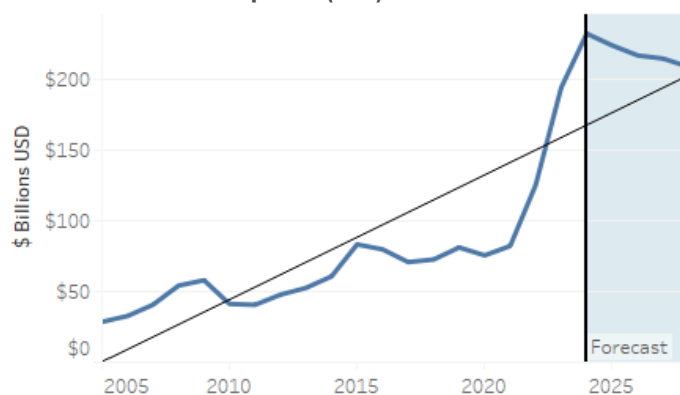
Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graph 12: U.S. Construction Spending: Water Supply, plus Sewage & Waste Disposal Put-in-place (PIP) Investment



Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graph 13: U.S. Construction Spending: Manufacturing Put-in-place (PIP) Investment



Source of actuals: ConstructConnect / Forecasts: Oxford Economics and ConstructConnect.
Chart: ConstructConnect

Graphs include a 'best fit' linear trend line.

Source of actuals: U.S. Census Bureau/Forecasts: Oxford Economics and ConstructConnect/Charts: ConstructConnect.

CURRENT VS CONSTANT DOLLARS

In the years immediately after COVID, the industry experienced a surge in both material and labor costs. As a result, the price tag associated with projects moved quickly higher while the amount of physical construction performed increased far less. Although this disconnect between the change in the cost of work and the physical amount of work performed was extremely evident in 2021 and 2022 this disconnect is always in effect. For this reason, it is necessary to have a tool that monitors prices relative to work performed, known as a “deflator.” The deflator table below, created with the help of our partners at Oxford Economics, allows the industry to compare spending levels at two different points in time while removing

the distortions caused by changing (that is, generally rising) prices.

In the table below the number of dollars spent from 2015 to 2023 increased by nearly \$900 billion from \$1.132 trillion to \$2.023 trillion, representing a 79-percent increase in the amount of money spent on construction. However, the amount of physical construction between these years did not increase by 79 percent as well. To know how much of that increased spending went toward additional physical construction requires knowing how much the price of work changed (increased) for the same amount or “unit” of work. By monitoring the price of construction work over time the Census Bureau observed that the price for a unit of construction

work increased in price between 2015 and 2023 by 54.5 percent. Comparing the rise in spending (79%) against the rising cost of work (54.5%) indicates that most of the increased dollar spend in 2023 as compared to 2015 was used to offset higher prices for labor and materials. Viewed from the perspective of the value of the dollar today, the amount of work accomplished in 2015 would require 1.767 trillion dollars today.

Looking ahead, between 2024 and 2028, spending is expected to increase by \$440.9 billion, or almost 21%. Of that increase, expected inflation will erode nearly 9% of the spending “power” of those dollars, leading to an estimated increase in ‘real’ work of about 12%.

U.S. ‘Constant’ Dollar or ‘Real’ Put-in-Place Construction Spending

Year	Construction Output Price Index (2015 = 100)	Change in Price Index Y/Y	Current \$ PIP Construction Spending (\$ billions)	% Change Y/Y	Constant \$ PIP Construction Spending (\$ billions)	Real Y/Y % Change in Constant \$ PIP Construction Spending
2015	100.0		\$ 1,132.1		\$ 1,132.1	
2016	103.6	3.6%	\$ 1,213.2	7.2%	\$ 1,170.5	3.4%
2017	107.1	3.3%	\$ 1,279.9	5.5%	\$ 1,194.9	2.1%
2018	110.4	3.1%	\$ 1,333.2	4.2%	\$ 1,207.3	1.0%
2019	115.9	4.9%	\$ 1,391.1	4.3%	\$ 1,200.5	-0.6%
2020	119.1	2.8%	\$ 1,499.6	7.8%	\$ 1,258.9	4.9%
2021	122.3	2.7%	\$ 1,653.4	10.3%	\$ 1,351.4	7.3%
2022	142.6	16.6%	\$ 1,902.7	15.1%	\$ 1,333.9	-1.3%
2023	159.5	11.8%	\$ 2,023.7	6.4%	\$ 1,269.0	-4.9%
2024	162.9	2.2%	\$ 2,154.6	6.5%	\$ 1,322.5	4.2%
2025	166.4	2.1%	\$ 2,281.7	5.9%	\$ 1,371.1	3.7%
2026	169.3	1.7%	\$ 2,423.1	6.2%	\$ 1,431.2	4.4%
2027	172.7	2.0%	\$ 2,526.4	4.3%	\$ 1,462.5	2.2%
2028	176.8	2.4%	\$ 2,595.4	2.7%	\$ 1,467.7	0.4%

Source of Price Index: Oxford Economics

Table: ConstructConnect

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