

# CMD's Q4 2015 Construction Starts Forecast Report

October 2015

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**The U.S. construction industry added 8,000 jobs in the latest month. The year-over-year gain in construction employment has been slightly over 200,000 jobs. On a percentage-change basis, that's +3.3%.**



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## Highlights

- Total construction starts came in slightly below our expectations in Q3, with stronger activity in the civil engineering sector being more than offset by weaker growth in the residential and non-residential segments. Nonetheless, residential starts continued to post a healthy pace of annual growth, and the apparent weakness in the non-residential segment may be overstated due to upward revisions to the historical data. Construction starts are expected to grow by 6.8% in 2015 as a whole, little changed from our forecast three months ago.
- After a weak start to the year, US GDP has been recovering decisively, and is forecast to rise by 2.5% in 2015 and 2.6% in each of 2016 and 2017. Wage growth should start to firm over the next few quarters. This, combined with low mortgage rates and slowing house price inflation, should boost rates of home ownership, buoying residential construction. Non-residential construction is forecast to strengthen as investment growth picks up, and construction in some sectors, such as offices and hotels, will be further helped by capacity constraints. Some of the civil engineering sectors could face some near-term disruption due to uncertainties over federal highway funding, although we expect that Congress will eventually come to an agreement.
- Sluggishness in the broader Canadian economy has continued under the weight of depressed oil prices, with falling GDP in Q1 and Q2 confirming Canada was in a technical recession in H1. Though we expect a modest economic recovery in H2, construction activity will remain relatively subdued this year. Looking ahead, the non-residential sector will drive construction activity. Over the medium-term, we expect the economic drag from the low oil price to wane. The civil engineering sector is forecast to return to the 3% range from 2017 onwards. Similarly, the residential sector is forecast to return to growth in 2016. The non-residential building sector is forecast to grow at the fastest pace over the forecast period, reaching double digits in 2016.

Sources: CMD (formerly Reed Construction Data)/Oxford Economics.  
Forecast reflects actual starts through Q3 2015.



## Overview

### Q3 US construction starts fell below expectations

Total construction starts came in slightly below our expectations in Q3. A strong outturn in the heavy engineering sectors was more than offset by weaker outturns in both residential and non-residential building. Despite this, residential building has been far from weak; total residential starts in Q3 were 11.8% above their level in the same period 2014 with particularly solid growth in the single-family residential segment. In contrast, starts of multi-family units were down in year-on-year terms. This stands in contrast to starts data from the Census Bureau, which showed close to 11% year-on-year growth in multi-family starts in Q3. As we have argued in previous reports, these data may be understating actual construction activity in the multi-family segment. The trend in cities towards multi-purpose buildings, whereby some residential units are included in an office block or retail center, may mean some multi-family units have been classified in other segments.

At first glance, total non-residential building, which fell 2.2% year-on-year in Q3, may look less robust. However, the level of the historical data has been revised up, so the apparent decline in Q3 is coming from a more favorable base. Within non-residential building, construction of private office buildings was the major segment to fall short of expectations. To some extent, the continued weakness in this segment is surprising, as employment is rising and office vacancies are declining. However, its growth has likely been contained by weaker than expected business investment thus far in 2015. The civil engineering category continued to surprise to the upside, with nearly 20% annual growth recorded in Q3. Construction in all engineering sub-sectors, with the exception of airports, was robust in Q3.

### Domestic activity driving US growth...

After a slow start to 2015, US GDP recovered strongly in Q2, and robust domestic

	2013	2014	2015	2016	2017	2018	2019
<b>US</b>							
<b>Macro variables</b>							
GDP	1.5	2.4	2.5	2.6	2.6	2.7	2.6
Population growth	0.7	0.8	0.8	0.8	0.8	0.8	0.8
Unemployment rate (%)	7.4	6.2	5.3	4.8	4.8	4.8	4.9
Real disposable income	-1.4	2.7	3.0	2.3	2.6	2.5	2.3
Central bank rate (%)	0.1	0.1	0.1	0.5	1.3	2.0	2.7
10-year government yield (%)	2.4	2.5	2.1	2.4	2.8	3.1	3.5
<b>Construction starts</b>							
Total starts	7.8	7.3	6.8	8.4	6.8	3.6	3.6
Residential	12.3	6.1	7.9	15.3	10.7	4.6	4.3
Non-res bldg	6.2	7.4	2.8	5.9	4.4	2.7	2.9
Civil engineering	2.9	9.2	11.8	0.4	2.8	3.2	3.0
<b>Canada</b>							
<b>Macro variables</b>							
GDP	2.0	2.4	1.1	2.0	2.7	2.8	2.6
Population growth	1.2	1.1	0.9	1.0	1.0	1.0	1.0
Unemployment rate (%)	7.1	6.9	6.8	6.7	6.5	6.4	6.3
Real disposable income	2.4	1.5	1.5	1.5	2.8	2.7	2.6
Central bank rate (%)	1.0	1.0	0.6	0.6	1.2	1.8	2.5
10-year government yield (%)	2.3	2.2	1.5	1.9	2.5	3.1	3.7
Exchange rate C\$ per US\$	1.03	1.10	1.28	1.27	1.20	1.14	1.10
<b>Construction starts</b>							
Total starts	15.1	12.2	2.1	4.3	5.0	4.8	4.0
Residential	-7.9	7.8	-1.8	4.0	6.1	5.7	5.5
Non-res bldg	-9.7	-8.7	8.3	10.8	8.1	7.2	5.3
Civil engineering	51.4	23.0	2.0	2.3	3.5	3.4	2.9

activity is expected to drive reasonable GDP growth over the next few years. Although employment growth was relatively modest in August and September, the recent trend has been distinctly positive. Wage growth should start to firm over the next few quarters as the labor market tightens, which is in turn expected to boost consumer spending. Furthermore, low mortgage rates, slowing house price inflation and stronger wage growth are also expected to support housing activity. On the downside, a strong dollar, sluggish global growth and reduced oil and gas investment are expected to constrain economic output. Business investment is expected to rise at a moderate pace, boosted by the solid domestic economy, although its growth will be contained by headwinds facing energy-related and export-oriented sectors. Overall, GDP is expected to rise by

2.5% in 2015, accelerating to 2.6% in both 2016 and 2017.

Meanwhile, inflation remains well below the 2% inflation target for now, but strengthening activity, higher wages and base effects should push inflation closer to target in 2016. The FOMC left interest rates unchanged in September following a bout of volatility and weakness in global financial markets. While these concerns weigh on the external outlook, their direct impact on domestic economic activity has likely been muted. We expect that a gradual rebound in headline inflation and fairly solid domestic economic data should provide the justification to lift interest rates by the end of the year; we expect that the first interest rate rise will occur in December.

Uncertainty over fiscal policy remains a risk to the economic outlook. We see four

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key policy items for Congress and the President over the next few months: raising the debt limit, reaching another spending agreement, and approving the TPP (Trans-Pacific Partnership) agreement as well as the Iran deal. Failure to reach an agreement on any of the above would have downside implications for GDP growth going into 2016.

*(Since the time of writing, points one and two have been resolved in satisfactory fashion.)*

## ...with construction seen strengthening in 2016

Total construction starts are expected to grow by 6.8% in 2015 as a whole, little changed from our forecast three months ago. In 2016, construction starts are expected to pick up to 8.4% growth, as rising household incomes boost growth in the residential sector and stronger business investment props up the non-residential segment. Only civil engineering construction is seen slowing from its heady pace of growth in 2015.

Total residential starts are seen growing by 7.9% in 2015, a downgrade from our forecast in the previous report based on a weaker-than-expected outturn in Q3. Nonetheless, strengthening income growth, favorable credit conditions and plenty of scope for catch-up should underpin robust growth in residential construction over the next few years. Residential starts are seen growing by 15.3% in 2016 with another double-digit rise expected in 2017. The potential for catch-up is particularly pronounced in the single-family segment, where starts are still about 50% below their 2005 peak. In contrast, the starts of multi-family buildings are much closer to their pre-recession peak. As we have previously noted, lower rates of home ownership since the global financial crisis have pushed people into the rental sector, which tends to favor multi-family accommodation. This, combined with the preference for city living among the millennial generation has boosted demand for multi-family units. However, this trend could reverse in the coming years, as easier credit conditions and stronger household incomes boost rates of home ownership, favoring single-family units.

In the non-residential segment, we have pushed up our 2015 growth forecast

Sector	Short-term drivers	Long-term drivers
Residential	Unemployment rate; Household liabilities; Mortgage interest rates; House prices; Population trends	House prices; Incomes
Non-residential building	Output trends in relevant sector; Population trends; Capacity utilization; Borrowing costs; Employment in relevant sector; Disposable income	Output trends in relevant sector; Employment in relevant sector
Civil engineering	Federal/State/Provincial spending; Government borrowing costs; Employment in government sector; Output trends in relevant sector	Federal/State/Provincial spending; Output trends in relevant sector

to 2.8%, although this is largely due to upward revisions to historical data rather than a fundamental change in the drivers. Stronger investment in 2016 should support growth of 5.9% in 2016, but the scope for catch-up growth is lower than in the residential sector, so a double-digit pace of growth over the forecast period is unlikely. Within the non-residential sector, the construction of private offices has been particularly disappointing over the last two years, with construction starts set to decline for the second year running in 2015. However, stronger investment, rising employment and declining office vacancy rates should underpin solid growth in the sector in 2016-17. Hotel construction has been particularly buoyant through 2015, and we expect the strength to continue going into 2016. Although the strong dollar has been weighing on international arrivals, the strength in the domestic market is driving domestic tourism and business travel (domestic tourism accounts for 85% of hotel stays). Hotel occupancy rates are currently near 20-year highs, so additional construction may be needed to ease capacity constraints.

Elsewhere in the non-residential segment, the outlook for starts of hospitals and clinics has been strengthened by the Supreme Court decision over the summer in favor of the Affordable Care Act. Employment in the healthcare sector has been rising strongly, and is currently

at a record high. Construction of hospitals is set to take off as the population ages, reversing the downward trend underway since 2008.

We have upgraded our 2015 forecast for total civil engineering starts to 11.8% growth, largely on the strength so far this year. However, there is considerable uncertainty surrounding the near-term outlook in many civil engineering sectors. Roads and bridges, in particular, tend to be provisioned by state and local governments, rather than by the federal government, which has kept these segments relatively insulated from gridlock in Washington. But in recent months, there has been considerable uncertainty surrounding the federal funding of highway infrastructure. A three month highway spending bill was passed in late-July, days before states and municipalities lost federal funding, and at the time of writing, Congress had passed another temporary funding measure set to last until mid-November. A six-year funding bill is currently making its rounds through Congress, but anecdotally, the uncertainty is causing some municipalities to delay projects. On balance, we expect that Congress will eventually come to an agreement, but there could be some near-term disruption in late 2015 and early 2016.

After a relatively strong outturn through 2015, construction in the miscellaneous sub-segment of heavy engineering,

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which includes the oil and gas sector, is expected to weaken in 2016. Anecdotally, the collapse in oil prices is causing some firms to delay or cancel planned projects, and indeed, private investment in the oil and gas sector fell by 23% in the first half of 2015. We expect that sector weakness should show up in the construction starts data as well.

## Canadian construction outlook

Total construction starts came in below expectation in Q3, with all three subsectors underperforming. Shrinking economic activity has knocked business sentiment, with implications for non-residential construction, while the low oil price has directly impacted upon civil engineering starts. High house prices continue to fan fears of a bubble, which combined with slower consumer outlays, has led to residential starts falling below expectation.

The Canadian economy continues to suffer from the impacts of the low oil price. The country fell into a technical recess during the first half of 2015 as shrinking business investment weighed on economic activity. Over the second half of the year, a pickup in consumption should drive the rebound in economic activity as rising earnings and employment coupled with lower gasoline prices boost consumer outlays. Rising exports on the back of the weak Canadian dollar will provide an additional engine of growth, particularly given the rising tide of consumer spending in the US. The election of Justin Trudeau as Prime Minister signals a more fiscally involved government over the coming years, with announcements suggesting increased investment in infrastructure.

The low oil price has had a myriad of effects on the construction industry. Directly, this has been felt most severely in the civil engineering subsector, and in particular, the all other civil category that encompasses Canada's huge extraction sector. Falling energy prices have led to falling revenues and investment spending, with many projects being delayed or cancelled. All other civil output is forecast to fall by roughly a quarter in 2015 on account of this.

Indeed, a recent report from the National Energy Board concluded that in the short-run, Canada's LNG infrastructure will likely see fewer new developments with demand for the end product forecast to be weak over the next few years. Whereas in the past, the flows of gas had been firmly heading south to the US, the US shale gas revolution has changed the terms of this relationship somewhat. Though Canada is still a net exporter, the shale gas fields south of the border mean that demand for Canadian gas has been tempered. In addition, mining projects that constitute a significant part of all other civil work are also being affected by falling metals prices. A number of iron ore projects have already been delayed as mining firms look to curtail costs rather than expand operations.

Nonetheless, civil engineering as a whole is still forecast to grow this year. For the most part, this is driven by a large upswing in power infrastructure. Canada is continuing to move toward renewable power sources with the former staples of electricity production, such as coal-fired and nuclear power plants, increasingly going out of commission. New hydroelectric and wind power projects will drive construction in the power sector going ahead. In particular, construction on a new 1.1GW hydroelectric plant in British Columbia began in Q3, while the 100MW Grand Bend wind power project, expected to be commissioned in 2016, will mark an important step in wind power's presence in the country.

Plans to invest in railways will drive growth in Canada's transport infrastructure, with the proposed CAD\$2.5bn high speed rail line between Windsor and Toronto being one particular case in point. In addition, the Canadian National Railway Company has announced spending plans for CAD\$500mn on rail networks in Alberta, Saskatchewan and Manitoba, importantly signaling confidence in those regions worst affected by the oil price slump.

The lower oil price is having a multitude of second-round effects beyond the direct impact in the civil engineering sector. Non-residential starts in the oil-sands regions have witnessed supply chain effects from shrinking extraction sector activity, with lower demand for office space in Alberta being one particular consequence.

Retail sector starts are forecast to fall this year. The impact of consumer spending shortfalls has dampened demand for new retail space, a point sharply illustrated by Target's decision to close all its Canadian branches this year. But looking to next year and beyond, we expect a pickup in retail starts as the Canadian public resumes spending and firms make up for previously weak investment in the retail space. Canada's aging demographics mean that demands on the healthcare system will continue to rise, forcing expansion of hospitals starts. The sector is forecast to expand by over 50% this year, with double digit growth continuing over the rest of the decade. Transportation terminals are forecast to expand at double digit pace over the forecast period in line with investments in Canada's rail infrastructure.

Manufacturing starts are forecast to approximately fall by half this year. However, despite the current pessimism surrounding Canadian manufacturing prospects, we expect starts growth to rebound next year. The weak Canadian dollar will drive demand for Canadian exports, while the prospective TPP trade deal will open up new, fast growing Asian markets to Canadian firms.

The Canadian residential market continues to exhibit signs of bubble-like prices. Recently, both Moody's and The Economist have issued warning calls citing high levels of household debt and rising house prices relative to incomes and the implications on housing market sustainability. We are forecasting residential starts to fall this year, caused by shrinking activity in the single-family segment. Growth is forecast to resume at a moderate pace next year, but the drag from lower employment and earnings relative to the US will constrain potential construction activity.

### Table 3: U.S. Type-of-Structure Forecasts

(\$ Billions USD)

	Actuals		Forecasts				
	2013	2014	2015	2016	2017	2018	2019
Single-family	146.126	155.483	172.466	200.441	222.930	233.480	244.150
Multi-family	46.904	49.318	48.592	54.366	59.112	61.477	63.495
<b>TOTAL RESIDENTIAL</b>	<b>193.031</b>	<b>204.801</b>	<b>221.058</b>	<b>254.807</b>	<b>282.042</b>	<b>294.958</b>	<b>307.645</b>
<i>(Yr/yr % change)</i>	<i>12.3%</i>	<i>6.1%</i>	<i>7.9%</i>	<i>15.3%</i>	<i>10.7%</i>	<i>4.6%</i>	<i>4.3%</i>
Hotels/Motels	6.780	8.549	9.657	10.679	11.684	11.939	12.267
Shopping/Retail	19.181	17.594	20.319	22.044	23.060	22.927	23.454
Parking Garages	1.981	1.801	2.397	2.202	2.234	2.257	2.312
Amusement	5.671	6.780	6.812	7.339	7.598	7.747	7.955
Private Offices	18.658	17.286	15.005	16.253	17.485	18.492	19.476
Governmental Offices	9.561	11.109	10.359	11.561	11.812	12.165	12.532
Laboratories (Schools & Industrial)	1.823	2.377	2.484	2.701	2.908	3.065	3.203
Warehouses	4.332	7.361	8.255	8.651	9.229	9.704	10.117
Sports Stadium/Convention Center	3.904	6.150	6.174	6.217	6.416	6.586	6.706
Transportation Terminals	13.027	7.282	6.722	7.719	8.610	9.499	10.390
<b>TOTAL COMMERCIAL</b>	<b>84.918</b>	<b>86.290</b>	<b>88.185</b>	<b>95.368</b>	<b>101.036</b>	<b>104.379</b>	<b>108.413</b>
<i>(Yr/yr % change)</i>	<i>19.8%</i>	<i>1.6%</i>	<i>2.2%</i>	<i>8.1%</i>	<i>5.9%</i>	<i>3.3%</i>	<i>3.9%</i>
<b>TOTAL INDUSTRIAL (manufacturing)</b>	<b>8.062</b>	<b>9.614</b>	<b>12.483</b>	<b>11.871</b>	<b>12.283</b>	<b>12.548</b>	<b>12.606</b>
<i>(Yr/yr % change)</i>	<i>40.9%</i>	<i>19.2%</i>	<i>29.8%</i>	<i>-4.9%</i>	<i>3.5%</i>	<i>2.2%</i>	<i>0.5%</i>
Religious	1.835	1.443	1.597	1.791	1.840	1.885	1.915
Hospitals/Clinics	16.099	13.987	14.514	16.942	18.223	19.454	20.655
Nursing Homes/Assisted Living	4.174	4.116	4.767	4.602	4.656	4.815	4.986
Libraries/Museums	2.345	2.233	2.192	2.603	2.630	2.655	2.697
Courthouse	1.253	0.953	1.329	1.555	1.521	1.516	1.531
Police/Fire	1.569	1.700	1.861	2.204	2.226	2.262	2.289
Prisons	1.259	1.195	2.355	2.337	2.360	2.414	2.459
Military	5.039	10.793	6.480	6.810	6.959	7.043	7.143
Educational Facilities	47.906	55.026	55.815	56.015	57.294	58.009	58.511
MED misc	2.651	2.467	2.989	3.367	3.332	3.463	3.678
<b>TOTAL INSTITUTIONAL</b>	<b>84.130</b>	<b>93.911</b>	<b>93.898</b>	<b>98.226</b>	<b>101.042</b>	<b>103.515</b>	<b>105.863</b>
<i>(Yr/yr % change)</i>	<i>-7.0%</i>	<i>11.6%</i>	<i>0.0%</i>	<i>4.6%</i>	<i>2.9%</i>	<i>2.4%</i>	<i>2.3%</i>
Miscellaneous Non-Res Building	3.271	3.931	4.574	5.377	5.741	5.576	5.659
<b>TOTAL NON-RES BLDG</b>	<b>180.381</b>	<b>193.746</b>	<b>199.139</b>	<b>210.843</b>	<b>220.101</b>	<b>226.018</b>	<b>232.542</b>
<i>(Yr/yr % change)</i>	<i>6.2%</i>	<i>7.4%</i>	<i>2.8%</i>	<i>5.9%</i>	<i>4.4%</i>	<i>2.7%</i>	<i>2.9%</i>
Airport	2.851	3.249	3.220	3.295	3.334	3.420	3.526
Roads	41.126	47.117	51.534	53.390	55.289	57.178	58.918
Bridges	10.669	11.174	12.570	13.133	13.792	14.389	14.970
Dams/Canal/Marine	5.363	5.051	5.160	4.691	4.711	4.710	4.766
Water & Sewage Treatment	23.534	25.675	30.599	29.275	29.666	30.622	31.586
Misc Civil (Power, etc.)	17.523	18.092	20.341	20.106	20.615	21.162	21.667
<b>TOTAL ENGINEERING</b>	<b>101.065</b>	<b>110.358</b>	<b>123.424</b>	<b>123.890</b>	<b>127.407</b>	<b>131.480</b>	<b>135.433</b>
<i>(Yr/yr % change)</i>	<i>2.9%</i>	<i>9.2%</i>	<i>11.8%</i>	<i>0.4%</i>	<i>2.8%</i>	<i>3.2%</i>	<i>3.0%</i>
<b>TOTAL NON-RESIDENTIAL</b>	<b>281.446</b>	<b>304.104</b>	<b>322.564</b>	<b>334.733</b>	<b>347.508</b>	<b>357.498</b>	<b>367.974</b>
<i>(Yr/yr % change)</i>	<i>5.0%</i>	<i>8.1%</i>	<i>6.1%</i>	<i>3.8%</i>	<i>3.8%</i>	<i>2.9%</i>	<i>2.9%</i>
<b>GRAND TOTAL</b>	<b>474.477</b>	<b>508.905</b>	<b>543.622</b>	<b>589.540</b>	<b>629.550</b>	<b>652.456</b>	<b>675.619</b>
<i>(Yr/yr % change)</i>	<i>7.8%</i>	<i>7.3%</i>	<i>6.8%</i>	<i>8.4%</i>	<i>6.8%</i>	<i>3.6%</i>	<i>3.6%</i>

Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD.  
Table: CMD.

**Table 4: U.S. States, Total Construction Starts – CMD**

States (alphabetical)	Actuals	Forecasts (Year versus previous year % change)				
	(Level in \$ Millions USD)	2015	2016	2017	2018	2019
	2014					
Alaska	\$2,404	-18.4%	-31.8%	4.2%	3.1%	3.4%
Alabama	\$9,416	-31.8%	14.2%	7.9%	3.7%	3.4%
Arkansas	\$5,234	-23.8%	1.9%	8.4%	4.6%	4.0%
Arizona	\$8,899	14.7%	26.3%	9.7%	4.7%	5.2%
California*	\$50,847	6.5%	28.8%	6.6%	3.5%	3.5%
Colorado	\$9,840	8.4%	-0.6%	5.2%	2.8%	3.1%
Connecticut	\$5,222	-14.0%	31.6%	4.2%	2.1%	1.8%
District Of Columbia	\$3,821	-56.7%	69.0%	3.1%	1.5%	1.5%
Delaware	\$1,616	2.9%	30.0%	7.9%	3.5%	3.2%
Florida*	\$26,612	35.4%	4.7%	6.0%	3.3%	4.2%
Georgia	\$16,024	0.8%	31.8%	6.7%	3.4%	3.3%
Hawaii	\$2,948	-21.6%	-3.8%	5.4%	2.3%	2.8%
Iowa	\$6,590	1.4%	-21.5%	6.7%	3.6%	3.2%
Idaho	\$3,159	1.2%	1.3%	6.7%	3.2%	4.0%
Illinois	\$15,714	12.0%	-2.2%	4.7%	2.6%	2.5%
Indiana	\$9,342	-9.3%	35.0%	6.7%	4.2%	3.7%
Kansas	\$4,855	14.8%	-20.6%	6.4%	3.0%	2.7%
Kentucky	\$6,123	-10.8%	5.7%	8.0%	3.9%	3.7%
Louisiana	\$9,415	27.4%	-31.0%	9.0%	3.8%	3.4%
Massachusetts	\$10,706	4.8%	13.3%	5.2%	2.6%	2.8%
Maryland	\$11,953	-19.0%	35.1%	5.2%	2.0%	2.2%
Maine	\$1,617	1.0%	37.6%	4.4%	1.1%	1.8%
Michigan	\$10,009	19.1%	-7.8%	4.3%	3.0%	2.7%
Minnesota	\$8,447	28.9%	-4.8%	3.7%	3.2%	3.1%
Missouri	\$8,226	7.9%	-0.8%	5.0%	3.1%	2.7%
Mississippi	\$4,129	1.0%	-3.6%	6.8%	4.1%	3.8%
Montana	\$1,478	11.8%	-3.9%	8.0%	4.1%	3.7%
North Carolina	\$18,904	8.9%	11.8%	8.9%	5.0%	4.7%
North Dakota	\$4,373	-2.2%	-55.4%	8.6%	4.2%	3.6%
Nebraska	\$4,091	-15.6%	4.5%	8.3%	4.0%	3.5%
New Hampshire	\$1,621	13.3%	36.9%	6.7%	2.9%	2.8%
New Jersey	\$10,710	-16.0%	20.1%	5.1%	2.0%	2.0%
New Mexico	\$2,922	-10.1%	17.2%	7.9%	2.8%	2.9%
Nevada	\$5,446	35.2%	-17.4%	7.1%	2.6%	3.0%
New York*	\$37,129	-11.8%	0.9%	5.8%	2.9%	3.1%
Ohio	\$13,168	3.3%	20.5%	5.2%	3.2%	2.7%
Oklahoma	\$6,522	12.4%	-5.3%	8.0%	4.3%	3.8%
Oregon	\$6,087	16.1%	10.0%	5.7%	4.0%	4.2%
Pennsylvania	\$15,881	12.6%	15.4%	5.7%	2.7%	2.7%
Rhode Island	\$1,062	-6.6%	57.2%	5.3%	1.5%	1.9%
South Carolina	\$9,317	4.6%	4.1%	7.6%	4.3%	4.1%
South Dakota	\$1,986	25.3%	-36.8%	8.6%	4.0%	3.5%
Tennessee	\$9,775	23.2%	4.8%	6.7%	4.3%	4.3%
Texas*	\$58,789	20.4%	9.7%	9.3%	5.3%	4.5%
Utah	\$6,115	10.4%	-1.1%	5.8%	3.6%	4.2%
Virginia	\$15,009	2.0%	16.8%	7.6%	3.1%	3.3%
Vermont	\$1,036	8.0%	3.5%	4.5%	2.7%	2.7%
Washington	\$14,246	6.9%	1.1%	7.0%	4.3%	4.3%
Wisconsin	\$6,407	36.1%	-4.5%	4.8%	3.0%	2.6%
West Virginia	\$1,603	29.9%	-3.1%	8.9%	2.7%	2.7%
Wyoming	\$2,063	-10.4%	-34.2%	9.1%	4.2%	3.4%

\*One in three Americans lives in one of the four shaded states, New York, Florida, Texas or California.

Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Table: CMD.

**Table 5: U.S. Four Largest States: Type-of-Structure Forecasts**

(\$ Billions USD)

		Actuals		Forecasts				
		2013	2014	2015	2016	2017	2018	2019
New York	Residential	12.833	15.009	11.661	10.452	11.424	11.859	12.217
	Non-res Building	19.570	15.785	12.919	15.528	16.303	16.648	17.185
	Engineering/Civil	5.044	6.336	8.180	7.059	7.239	7.473	7.702
	Total	37.447	37.129	32.760	33.039	34.966	35.980	37.104
	(Yr vs previous yr % Change)	29.2%	-0.9%	-11.8%	0.9%	5.8%	2.9%	3.1%
Florida	Residential	15.250	14.360	19.475	19.040	20.841	21.613	22.544
	Non-res Building	7.042	7.516	10.063	12.301	12.634	12.989	13.584
	Engineering/Civil	5.485	4.735	6.504	6.386	6.505	6.692	6.882
	Total	27.776	26.612	36.041	37.727	39.980	41.295	43.010
	(Yr vs previous yr % Change)	24.2%	-4.2%	35.4%	4.7%	6.0%	3.3%	4.2%
Texas	Residential	27.674	31.141	33.635	40.482	46.430	49.638	52.627
	Non-res Building	18.079	17.416	24.949	24.109	25.195	26.106	26.786
	Engineering/Civil	8.464	10.232	12.220	13.116	13.346	13.721	14.080
	Total	54.217	58.789	70.805	77.707	84.971	89.465	93.492
	(Yr vs previous yr % Change)	7.5%	8.4%	20.4%	9.7%	9.3%	5.3%	4.5%
California	Residential	14.651	16.538	18.550	23.212	25.365	26.346	27.373
	Non-res Building	19.685	23.483	24.167	28.815	30.226	31.192	32.225
	Engineering/Civil	11.044	10.826	11.425	17.695	18.729	19.385	20.025
	Total	45.380	50.847	54.142	69.722	74.320	76.923	79.623
	(Yr vs previous yr % Change)	-6.5%	12.0%	6.5%	28.8%	6.6%	3.5%	3.5%

Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD.  
Table: CMD.

## Tweeted by CMD:

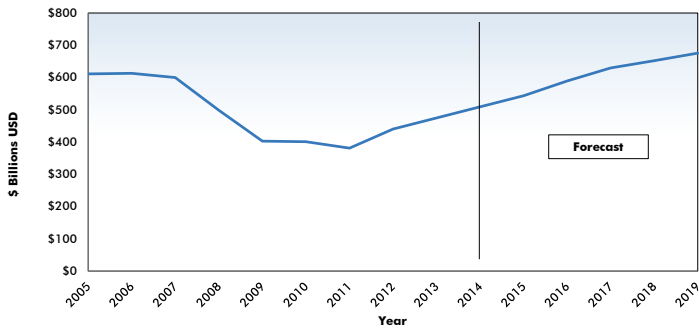


@CMD\_GroupLLC

The **U.S.** initial jobless claims figure has been below **300,000** for 34 weeks in a row. The latest four-week average was **265,000**. The last time that level was beaten occurred for the week ending **December 15, 1973**, almost **42** years ago.

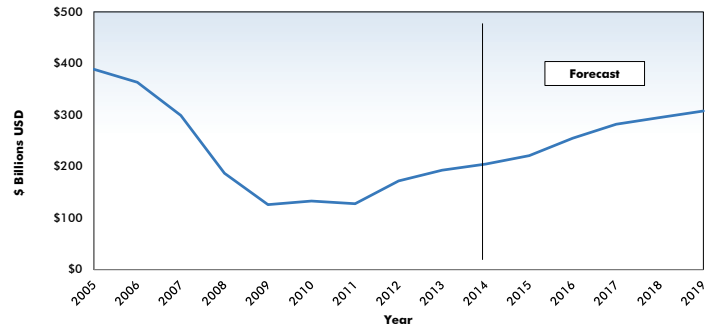


### Graph 1: U.S. Total Construction Starts – CMD



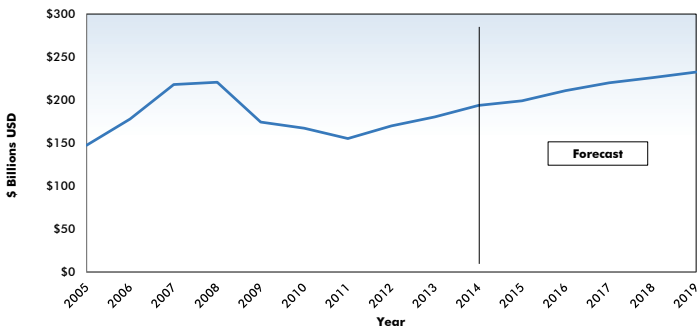
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

### Graph 2: U.S. Total Residential Construction Starts – CMD



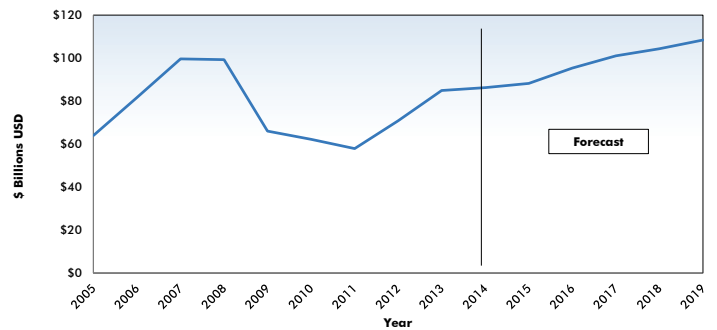
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

### Graph 3: U.S. Total Non-Residential Building Starts – CMD



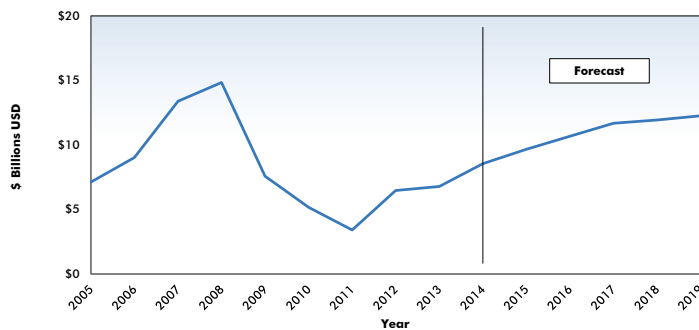
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

### Graph 4: U.S. Total Commercial Construction Starts – CMD



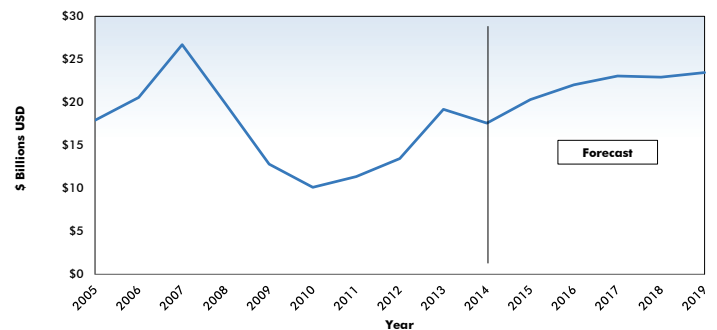
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

### Graph 5: U.S. Hotel/Motel Construction Starts – CMD



Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

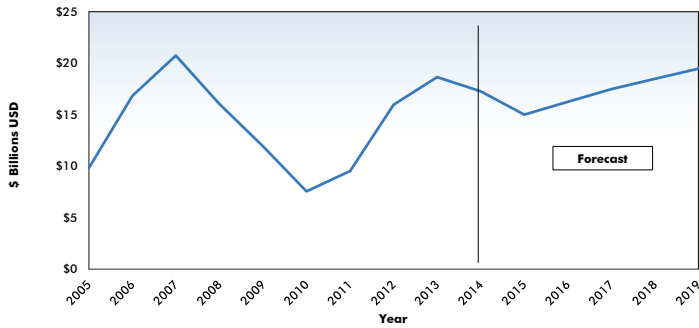
### Graph 6: U.S. Shopping/Retail Construction Starts – CMD



Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

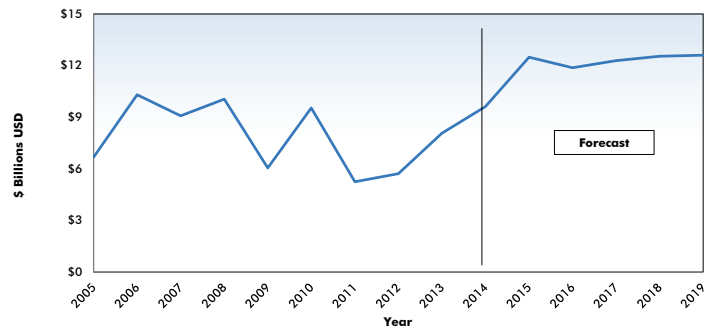


**Graph 7: U.S. Private Office Building Construction Starts – CMD**



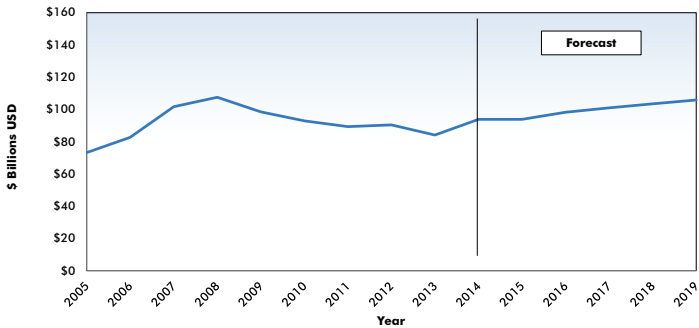
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 8: U.S. Total Industrial/Manufacturing Construction Starts – CMD**



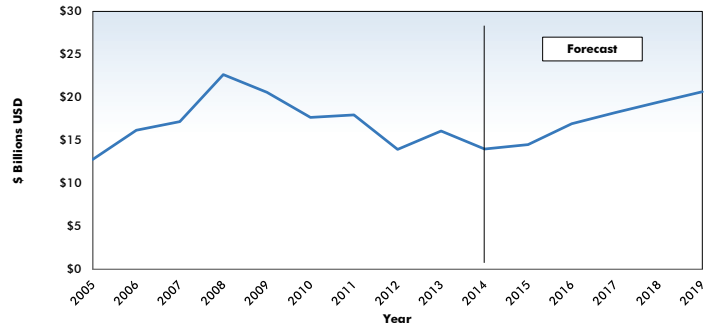
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 9: U.S. Total Institutional Construction Starts – CMD**



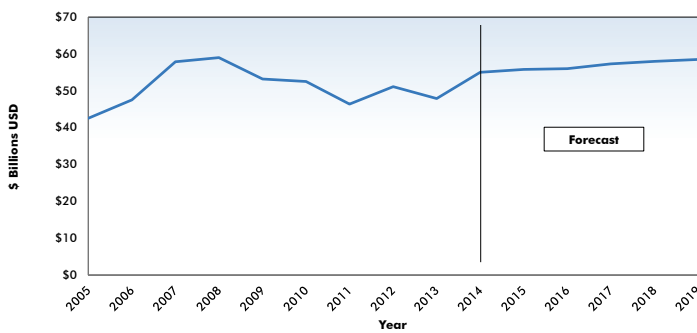
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 10: U.S. Hospital and Clinic Construction Starts – CMD**



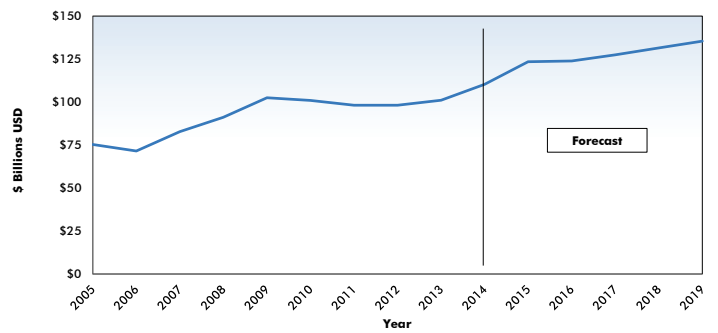
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 11: U.S. Total Educational Construction Starts – CMD**



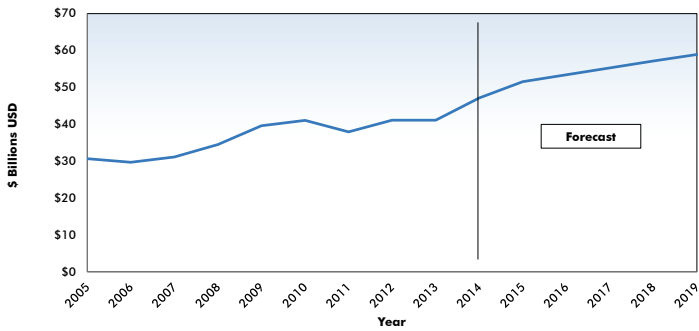
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 12: U.S. Total Heavy Engineering/Civil Construction Starts – CMD**



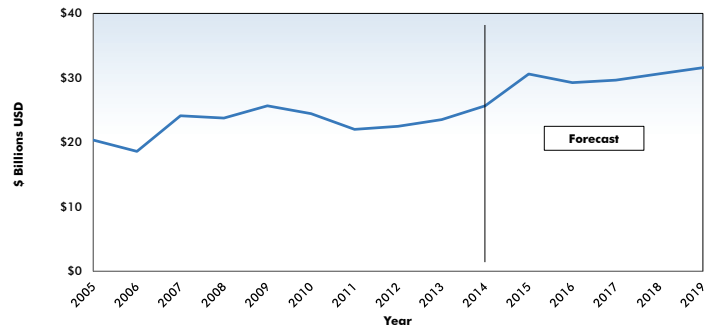
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 13: U.S. Roadwork Construction Starts – CMD**



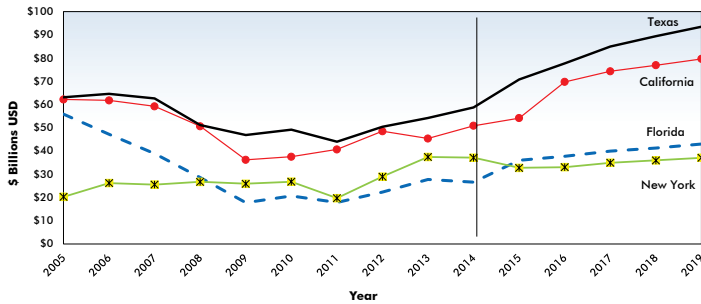
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 14: U.S. Water and Sewage Treatment Construction Starts – CMD**



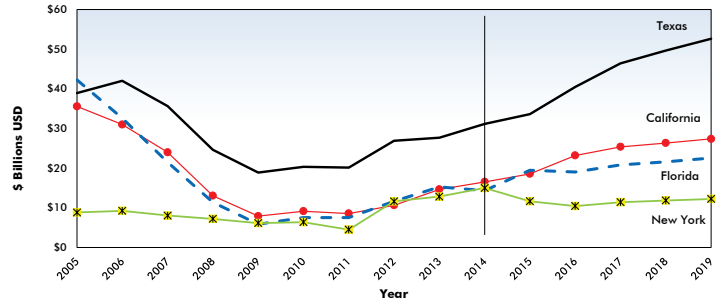
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 15: U.S. Four Largest States (by Population): Total Construction Starts – CMD**



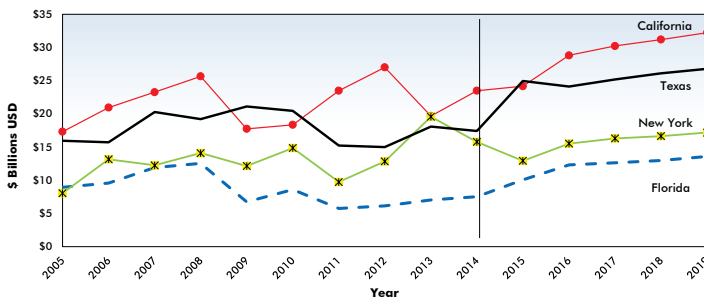
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 16: U.S. Four Largest States: Total Residential Construction Starts – CMD**



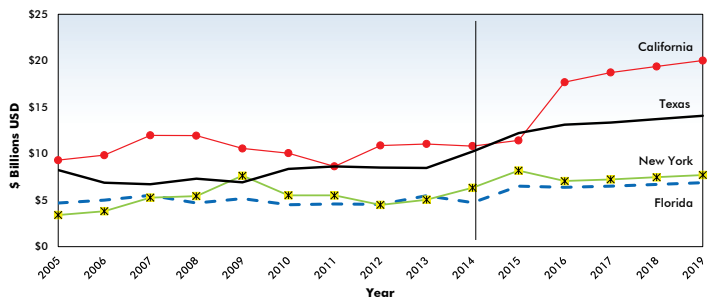
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 17: U.S. Four Largest States: Total Non-residential Building Starts – CMD**



Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 18: U.S. Four Largest States: Total Engineering/Civil Construction Starts – CMD**



Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Table 6: Canada Type-of-Structure Forecasts**  
(\$ Billions CAD)

	Actuals		Forecasts				
	2013	2014	2015	2016	2017	2018	2019
Single-family	14.198	14.126	13.667	14.410	15.366	16.305	17.175
Multi-family	9.847	11.786	11.788	12.060	12.723	13.391	14.147
<b>TOTAL RESIDENTIAL</b>	<b>24.046</b>	<b>25.912</b>	<b>25.455</b>	<b>26.470</b>	<b>28.089</b>	<b>29.697</b>	<b>31.323</b>
(Yr/yr % change)	-7.9%	7.8%	-1.8%	4.0%	6.1%	5.7%	5.5%
Hotels/Motels	1.033	0.380	0.776	0.895	0.962	0.999	1.004
Private Offices	2.366	2.237	2.352	2.411	2.476	2.543	2.598
Governmental Offices	1.449	1.633	1.479	1.642	1.700	1.779	1.836
Shopping/Retail	2.186	1.820	1.343	1.470	1.545	1.611	1.673
Retail Miscellaneous	0.521	0.428	0.409	0.449	0.505	0.559	0.589
Parking Garages	0.068	0.091	0.116	0.120	0.126	0.132	0.136
Amusement	2.724	1.181	1.507	1.459	1.587	1.705	1.782
Warehouses	0.624	0.708	0.780	0.848	0.898	0.946	1.005
<b>TOTAL COMMERCIAL</b>	<b>10.970</b>	<b>8.479</b>	<b>8.763</b>	<b>9.295</b>	<b>9.799</b>	<b>10.273</b>	<b>10.623</b>
(Yr/yr % change)	23.0%	-22.7%	3.4%	6.1%	5.4%	4.8%	3.4%
<b>TOTAL INDUSTRIAL (manufacturing)</b>	<b>1.351</b>	<b>2.068</b>	<b>1.060</b>	<b>1.644</b>	<b>1.875</b>	<b>2.060</b>	<b>2.198</b>
(Yr/yr % change)	-68.0%	53.1%	-48.8%	55.1%	14.1%	9.9%	6.7%
Religious	0.119	0.129	0.139	0.150	0.158	0.163	0.166
Hospitals/Clinics	1.134	1.366	2.141	2.468	2.900	3.388	3.849
MED misc	0.680	0.620	0.968	1.079	1.138	1.186	1.223
Transportation Terminals*	0.306	0.399	0.721	0.848	1.015	1.145	1.258
Police/Fire	0.674	1.198	1.073	1.298	1.439	1.591	1.624
Educational Facilities	3.893	3.199	4.048	4.176	4.341	4.500	4.640
<b>TOTAL INSTITUTIONAL</b>	<b>6.807</b>	<b>6.912</b>	<b>9.090</b>	<b>10.018</b>	<b>10.990</b>	<b>11.972</b>	<b>12.761</b>
(Yr/yr % change)	-15.4%	1.6%	31.5%	10.2%	9.7%	8.9%	6.6%
<b>TOTAL NON-RES BUILDING</b>	<b>19.127</b>	<b>17.459</b>	<b>18.912</b>	<b>20.957</b>	<b>22.664</b>	<b>24.305</b>	<b>25.582</b>
(Yr/yr % change)	-9.7%	-8.7%	8.3%	10.8%	8.1%	7.2%	5.3%
Bridges	1.888	1.606	6.136	4.610	4.297	4.188	4.211
Dams/Canal/Marine	0.072	0.099	0.373	0.310	0.312	0.317	0.323
Water & Sewage Treatment	3.361	3.499	3.862	4.107	4.296	4.488	4.594
Roads	6.317	6.458	6.909	7.470	7.799	8.043	8.189
Power Infrastructure	12.049	6.577	12.351	13.036	13.494	13.989	14.300
All Other Civil (Oil & Gas etc.)	23.268	39.538	29.308	30.785	32.231	33.554	34.859
<b>TOTAL ENGINEERING</b>	<b>46.954</b>	<b>57.776</b>	<b>58.938</b>	<b>60.319</b>	<b>62.429</b>	<b>64.579</b>	<b>66.477</b>
(Yr/yr % change)	51.4%	23.0%	2.0%	2.3%	3.5%	3.4%	2.9%
<b>TOTAL NON-RESIDENTIAL</b>	<b>66.081</b>	<b>75.235</b>	<b>77.850</b>	<b>81.276</b>	<b>85.092</b>	<b>88.884</b>	<b>92.059</b>
(Yr/yr % change)	26.6%	13.9%	3.5%	4.4%	4.7%	4.5%	3.6%
<b>GRAND TOTAL</b>	<b>90.127</b>	<b>101.147</b>	<b>103.305</b>	<b>107.746</b>	<b>113.181</b>	<b>118.581</b>	<b>123.382</b>
(Yr/yr % change)	15.1%	12.2%	2.1%	4.3%	5.0%	4.8%	4.0%

\* 'Transportation terminals' is the one type-of-structure that is categorized differently in Canada (institutional) than in the U.S. (commercial), for reasons having to do with government statistics.

Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD.  
Table: CMD.

**Table 7: Canadian Provinces, Total Construction Starts – CMD**

Regions/Provinces (East to West)	Actuals (Level in \$ Millions CAD)	Forecasts (Year versus previous year % change)				
	2014	2015	2016	2017	2018	2019
Atlantic region	\$16,775	-73.7%	34.4%	3.5%	3.3%	1.9%
Quebec	\$11,640	29.8%	7.8%	5.6%	5.0%	3.2%
Ontario	\$22,643	27.8%	11.8%	4.3%	5.3%	3.5%
Manitoba	\$2,342	12.5%	15.5%	5.5%	5.1%	3.2%
Saskatchewan	\$6,413	-46.6%	-9.9%	5.2%	4.6%	3.0%
Alberta	\$27,648	-14.6%	-13.6%	7.7%	4.6%	5.7%
British Columbia	\$13,685	84.0%	5.9%	3.8%	4.4%	4.6%

Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD.  
Table: CMD.

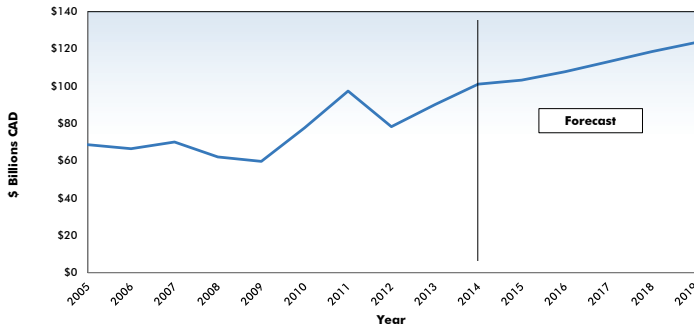
**Table 8: Canada Four Largest Provinces: Type-of-Structure Forecasts**

(\$ Billions CAD)

		Actuals		Forecasts				
		2013	2014	2015	2016	2017	2018	2019
Quebec	Residential	3.512	3.436	2.979	3.428	3.713	3.920	4.085
	Non-res Building	4.019	3.603	2.748	3.483	3.867	4.232	4.477
	Engineering/Civil	3.036	4.601	9.384	9.373	9.616	9.904	10.077
	Total	10.568	11.640	15.111	16.284	17.195	18.055	18.639
	(Yr vs previous yr % Change)	-19.1%	10.2%	29.8%	7.8%	5.6%	5.0%	3.2%
Ontario	Residential	8.688	9.689	10.479	10.483	10.907	11.520	12.037
	Non-res Building	6.048	5.225	5.567	8.405	8.973	9.697	10.142
	Engineering/Civil	7.336	7.728	12.882	13.443	13.846	14.303	14.587
	Total	22.072	22.643	28.928	32.331	33.726	35.520	36.766
	(Yr vs previous yr % Change)	-6.1%	2.6%	27.8%	11.8%	4.3%	5.3%	3.5%
Alberta	Residential	4.108	4.423	3.630	3.074	3.435	3.660	3.982
	Non-res Building	2.979	2.526	3.775	2.817	3.099	3.200	3.369
	Engineering/Civil	19.155	20.699	16.206	14.510	15.450	16.126	16.934
	Total	26.242	27.648	23.611	20.402	21.983	22.986	24.285
	(Yr vs previous yr % Change)	54.7%	5.4%	-14.6%	-13.6%	7.7%	4.6%	5.7%
British Columbia	Residential	4.627	5.630	6.371	7.176	7.545	7.957	8.467
	Non-res Building	2.920	4.233	4.323	4.157	4.475	4.771	5.098
	Engineering/Civil	8.046	3.822	14.487	15.338	15.668	16.190	16.695
	Total	15.593	13.685	25.182	26.671	27.688	28.917	30.260
	(Yr vs previous yr % Change)	-6.9%	-12.2%	84.0%	5.9%	3.8%	4.4%	4.6%

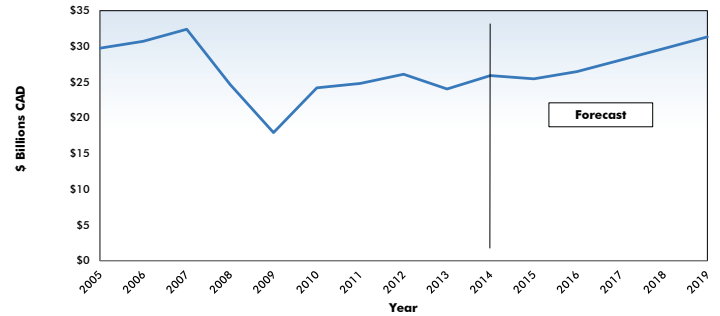
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD.  
Table: CMD.

### Graph 19: Canadian Total Construction Starts – CMD



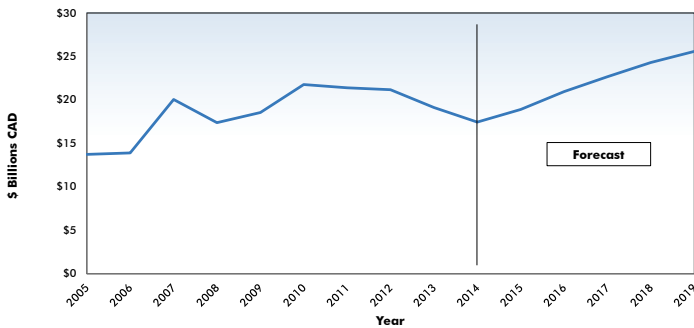
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

### Graph 20: Canadian Residential Construction Starts – CMD



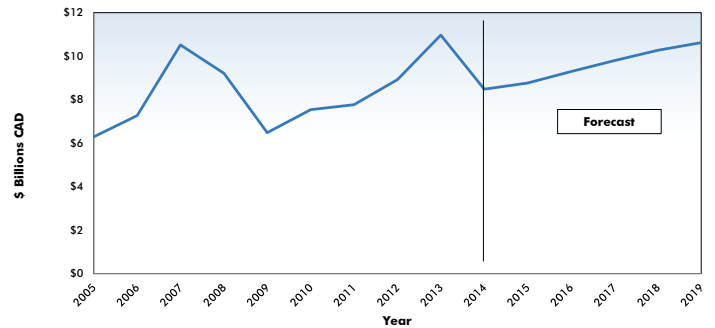
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

### Graph 21: Canadian Non-Residential Building Starts – CMD



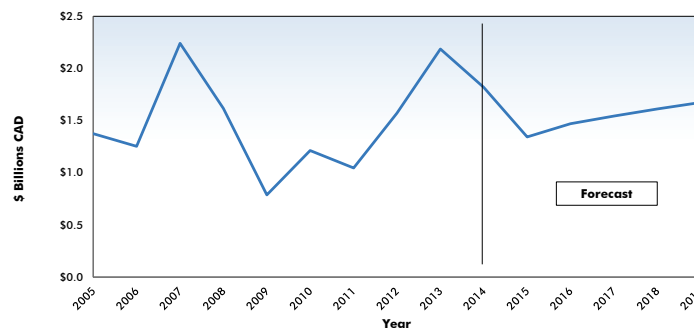
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

### Graph 22: Canadian Commercial Construction Starts – CMD



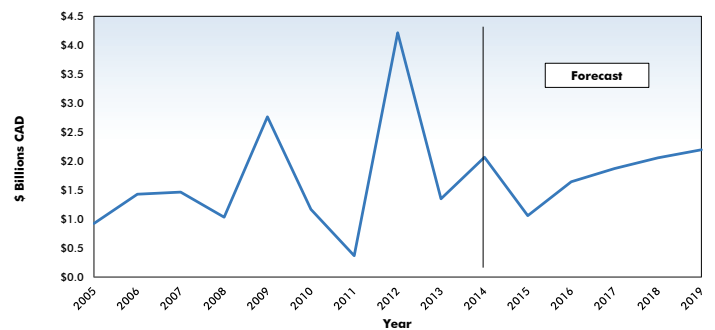
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

### Graph 23: Canadian Shopping/Retail Construction Starts – CMD



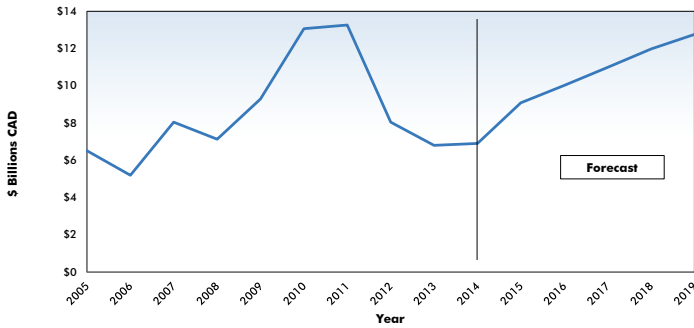
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

### Graph 24: Canadian Industrial Construction Starts – CMD



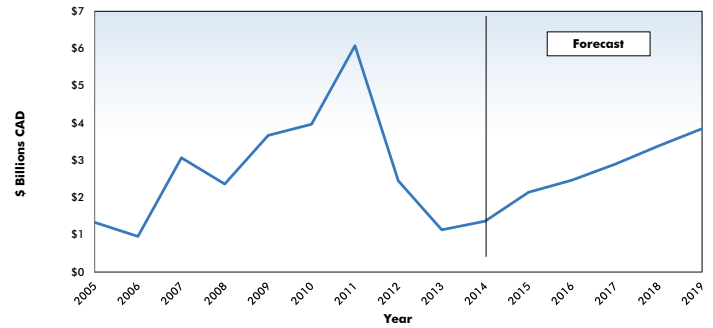
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 25: Canadian Institutional Construction Starts – CMD**



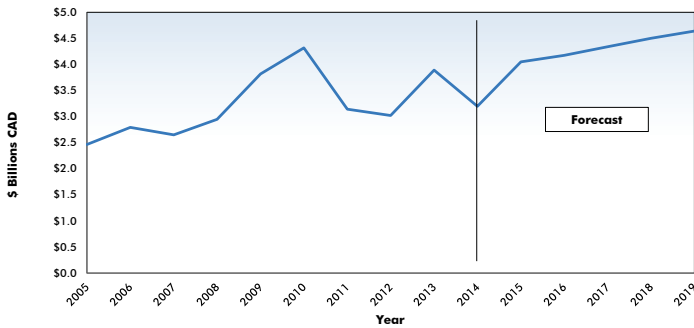
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 26: Canadian Hospital/Clinic Construction Starts – CMD**



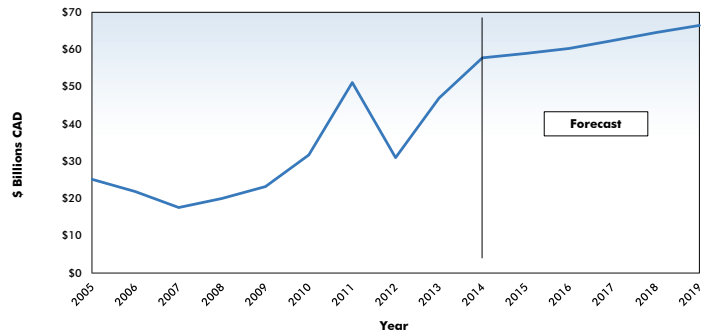
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 27: Canadian Education Construction Starts – CMD**



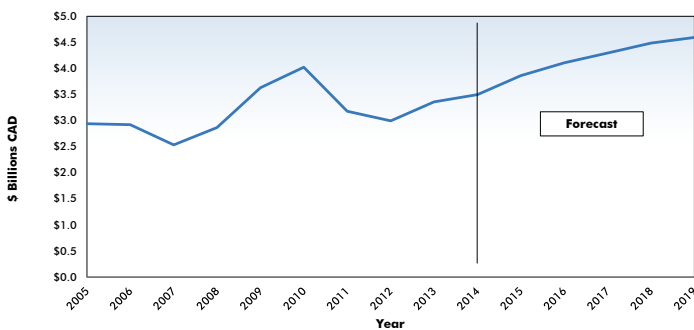
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 28: Canadian Engineering Construction Starts – CMD**



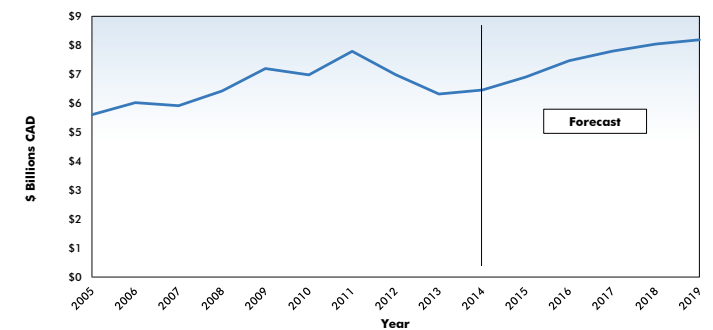
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 29: Canadian Water and Sewage Construction Starts – CMD**



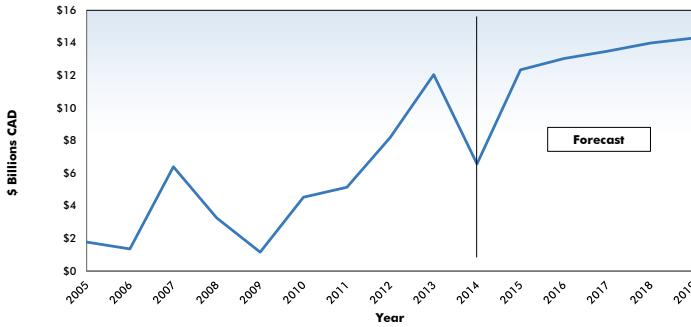
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 30: Canadian Roadwork Construction Starts – CMD**



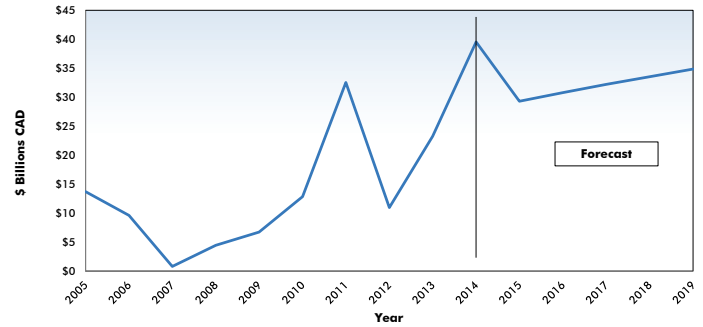
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 31: Canadian Power Infrastructure Construction Starts – CMD**



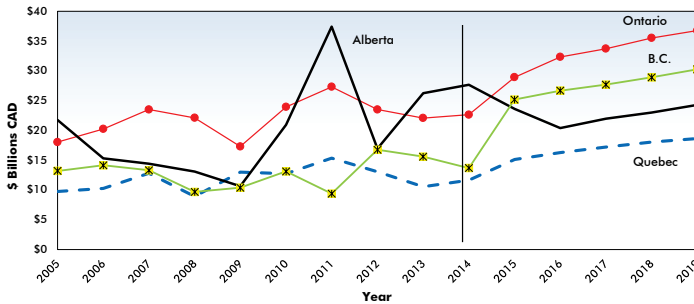
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 32: Canadian Oil and Gas Plants, Pipelines Construction Starts – CMD**



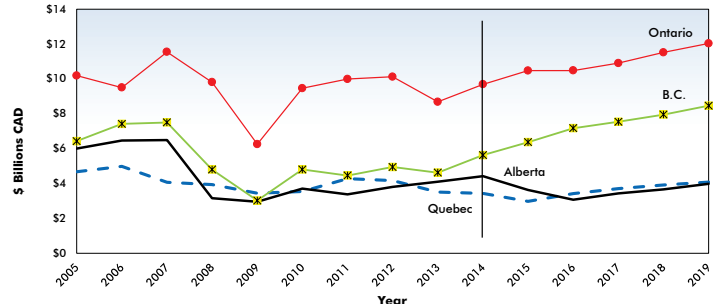
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 33: Canada Four Largest Provinces (by Population): Total Construction Starts – CMD**



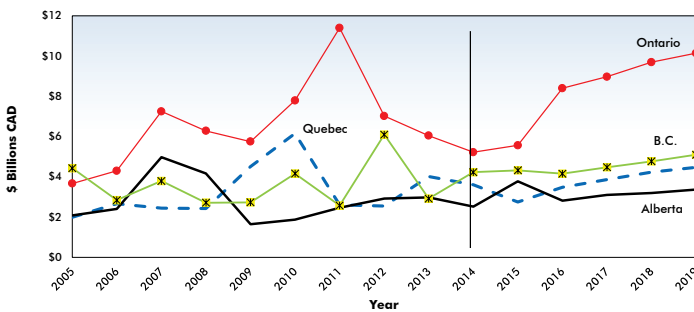
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 34: Canada Four Largest Provinces: Total Residential Construction Starts – CMD**



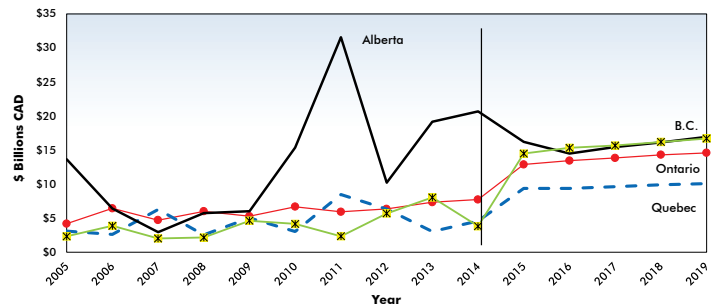
Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 35: Canada Four Largest Provinces: Total Non-residential Building Starts – CMD**



Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

**Graph 36: Canada Four Largest Provinces: Total Engineering/Civil Construction Starts – CMD**



Source of actuals: CMD "Insight" / Forecasts: Oxford Economics and CMD / Chart: CMD.

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