CMD's Q1 2015 Construction Starts Forecast Report

January 2015

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U.S. total employment in December climbed by 252,000 jobs versus November. The annual increase was 3.0 million jobs, accounting for a year-over-year percentage change of +2.1%.

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Highlights

- US construction starts came in broadly in line with expectations in Q4 with total starts rising 5.9% in 2014. A slight undershoot in residential starts was offset by above expectation growth in the civil engineering and non-residential building sectors.
- The outlook for the US economy continues to improve, as evidence of sustainable wage growth starts to set in and business spending continues to expand. In addition, falling inflation caused by oil price declines should increase demand via higher real spending. This should translate into growth in both residential and non-res building construction, while civil engineering is likely to be more subdued on flat Federal spending growth
- In Canada, total starts disappointed this year, falling 7.5%. Much of this was the result of falls in civil engineering starts amid uncertainty in Canadian oil sands construction, and we expect that civil engineering starts will essentially stagnate in 2015. Non-residential building fell for the second year running, but we expect 2015 to mark a return to growth. Residential starts are likely to grow more slowly than south of the border in the medium term due to the relative overheating of the Canadian housing market and higher level of indebtedness of Canadian households.
- Canadian GDP is expected to grow 2.4% this year, a slight upgrade on our report three months ago, but over the medium term, economic conditions are essentially unchanged, with growth set to remain in the 2–2 ½% range. The Canadian consumer will also benefit from lower oil prices, although aggregate investment may be constrained due to falls in energy-sector investment.

Sources: CMD (formerly Reed Construction Data)/Oxford Economics. Forecast reflects actual starts through Q4 2014.

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CMD Insight

Overview

Q4 US construction starts broadly in line with expectations

US construction starts in Q4 came in broadly in line with our forecast three months ago. For the year as a whole, total starts rose 5.9% from their level in 2013. The majority of growth came from the civil engineering sector. This development was slightly surprising, given cuts to the federal government, but this was partially offset by stronger expenditure by state and local sector governments. The rate of growth in US residential construction slowed this year to 2.9% as affordability issues started to emerge, and wages have failed to keep pace with house price growth since 2012. Nonetheless there are signs that wages have started to pick up in Q4, leading to hopes of revived fortunes in residential construction in 2015. Non-residential building finished the year in line with expectations taking average growth for the year to 7%, an acceleration on the previous year as business spending starts to gain traction.

Summary forecasts
(Annual percentage changes unless specified otherwise)

	2013	2014	2015	2016	2017	2018	2019
US							
Macro variables							
GDP	2.2	2.4	3.3	2.9	2.7	2.7	2.7
Population growth	0.7	0.8	0.8	0.8	0.8	0.8	0.8
Unemployment rate (%)	7.4	6.2	5.5	5.3	5.2	5.1	5.0
Real disposable income	-0.2	2.4	2.7	3.2	2.7	2.4	2.4
Central bank rate (%)	0.1	0.1	0.4	1.7	2.7	3.5	3.8
10-year government yield (%)	2.4	2.5	2.4	3.2	3.7	4.0	4.2
Construction starts							
Total starts	6.5	5.9	10.5	6.6	4.4	4.2	3.6
Residential	13.5	2.9	19.9	10.7	6.2	5.3	4.6
Non-res bldg	1.4	7.0	7.7	5.7	4.2	3.5	2.8
Civil engineering	3.6	9.6	-1.2	-0.3	0.4	2.8	2.7
Canada							
Macro variables							
GDP	2.0	2.5	2.4	2.2	2.4	2.3	2.2
Population growth	1.2	1.1	1.1	1.0	1.0	1.0	1.0
Unemployment rate (%)	7.1	6.9	6.6	6.6	6.5	6.4	6.3
Real disposable income	2.4	1.8	2.9	2.4	2.2	2.2	2.2
Central bank rate (%)	1.0	1.0	1.1	2.0	3.3	3.9	4.0
10-year government yield (%)	2.3	2.2	2.2	3.2	3.8	4.2	4.5
Exchange rate C$ per US$	1.03	1.10	1.17	1.14	1.11	1.09	1.08
Construction starts							
Total starts	14.0	-7.5	4.4	7.3	5.2	4.5	3.9
Residential	-9.8	1.7	4.5	4.8	4.0	3.8	3.8
Non-res bldg	-12.0	-18.5	16.0	9.7	7.6	7.8	5.7
Civil engineering	51.7	-7.7	0.4	7.7	4.9	3.4	3.1

US GDP growth forecast upgraded to 3.3% for 2015

The US economy continued its upward march in Q3 2014 as real GDP growth came in at 5% annualized on the quarter. Underpinned by rising spending from both households and business, we now estimate GDP growth for 2014 at 2.4%, rising to 3.3% in 2015. A significantly improved labor market, relative to the start of 2014, and emerging growth in real wages are driving growth in consumer spending. This should start feeding through to the housing market as affordability issues begin to subside.

The recent falls in oil prices will provide a boost to demand in the economy as lower prices encourage increased consumer spending and raise business investment, a boon to non-residential spending construction as firms increase their physical capacity.

CPI inflation cooled considerably in the latest data amid tumbling oil prices and a weaker global outlook. We now expect CPI inflation to average 1.1% in 2015, temporarily depressed by the lower oil price. Although we see their impact on inflation as transitory, we believe that the Fed will opt to delay its rate hike to September until there is firmer evidence of solid wage growth (pushed back from June in the last update).

US Construction

Construction starts in Q4 progressed much in line with expectations. The residential sector surprised slightly on the downside, but the stronger upturn in civil engineering starts resulted in total starts coming in only 0.8% below forecast.

For 2014 as a whole, residential starts dipped slightly below our expectations in the last report. As the weakest of the three subsectors, residential starts have been hit by a cooling US housing market as affordability dogged overall housing demand. Within the residential sector, all of the growth has come from single-family housing, which still has significant catch-up potential on its pre-crisis level after effective stagnation over the last seven years. In addition, extreme weather conditions in Q1 further acted to depress residential building prospects in 2014.

Multi-family dwellings, on the other hand, retreated by 11.9% in 2014 after several years of upward surge. However, we expect 2014's fall back will be a temporary movement with growth this year forecast at 20.9%. Much of the relative strength in multi-family over single-family in recent years is due to changing demographic profiles. As the economy improves, the millennial generation have begun to form new

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households (the 20-29 age bracket is now the most populous). Amongst this generation, housing preferences tend to be toward inner city areas, which tend to consist of multi-family residential buildings such as apartments or condominiums.

In spite of relative weakness in the housing sector last year, our view remains that headline residential starts will return to strong growth in 2015, as new job formation continues — albeit at the slightly slower pace of 190,000 new jobs per month — and we start to see real gains in payrolls coming through to wage growth. This will have a positive effect on consumer spending, which when combined with looser lending conditions, will boost the demand for housing.

The non-residential building sector performed far more robustly for 2014 at 7% growth, very close to our forecast last October. At the headline level, non-res building starts were supported by improving business conditions. Increasing business investment has pushed up spending on real estate across the commercial sector as firms seek to expand their operations on the expectation of future demand. Within the government sector, expenditures at the state and local level were up over 2013, resulting in a 13.4% expansion in government office starts, although we expect this area of the economy to set on a fairly tepid growth path in the coming years as fiscal pressures at the federal, state and local levels cap potential spending. The constrained outlook for public spending and a relative decline in the population of 5-19 year olds will also depress the growth path in the schools sector; the average annual growth forecast for total school starts over 2015-19 stands at 2% compared to headline institutional starts at 4.4%.

Strength in the industrial sector was particularly impressive through 2014 with total growth for the year of 16.5%. The outlook for 2015 is also forecast to remain buoyant at 7.8%. The demand for physical space from the US manufacturing sector is on the rise as US firms continue to re-shore their operations. Lured by low energy prices and a declining competitive advantage in the developing countries (notably in China), the US has once again become an attractive destination for high value-added manufacturing.

Drivers of headline sectors

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

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Civil engineering construction starts finished 2014 with the highest growth rate of the headline US subsectors, expanding by 9.6% on the year. This was largely driven by growth in road construction, the largest engineering category, which recorded a gain of 14.7% in 2014. Bridges and water treatment infrastructure also displayed robust growth of 5.9% and 10.7% respectively. The growth in civil engineering in 2014 came despite flat spending at the federal level. Stronger growth in state and local government investment underpinned the expansion. However, given our view on the constrained path of public spending over the medium term, particularly after the Republicans now control both houses, we remain fairly downbeat on the outlook for civil engineering. As much of this spending is sourced from the public purse, it is likely that total starts in the sector will feel the pinch. Furthermore, civil engineering is less susceptible to economic swings and therefore is less likely to receive a cyclical boost as the economy returns to the 3% growth range this year. Moreover, the sector doesn't have the same catch-up potential as residential starts, which fell almost 70% between 2005-09. Indeed, civil engineering starts are now 48% above their 2005 level. As such, we expect average annual growth for the sector of 0.9% over the period 2015-19.

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Canadian Construction

The outlook for the Canadian economy is set to remain fairly constant over the forecast period with GDP growth in the 2-2½% range out to 2019 and unemployment expected to remain fairly stable around 6%. There are some fears that if the oil price stays below the US$70-80pb range (estimated to be the break-even price in the oil sands) for an extended period, some companies may be forced to postpone investment plans. Although there will be some new investment spending from the non-energy sector on the back of better terms of trade with the US and robust domestic growth, we have nonetheless downgraded our expectations of investment growth to 2.6% for 2015, from 3.1% three months ago.

The key drivers of our Canadian outlook over the medium term stem from the boost in demand as low oil prices feed throughout the economy, pushing up consumer growth and business investment in the non-energy sector, although we are cautious of the effects on energy investment. A further consequence of the falling oil price has been to weaken the Canadian dollar, thereby boosting Canadian manufacturing exports to the US, although the relatively smaller size of Canadian manufacturing will moot the overall effect. Also, given the general fall in the price level, the Bank of Canada has significant room to maintain accommodative monetary policy absent the risk of inflation.

Canadian residential starts grew by just 1.7% in 2014 amid concerns about the sustainability of Canada's housing market growth. Measures by the authorities to check the pace of Canada's housing activity, such as reducing the maximum amortization period to 25 years, lowering the maximum amount Canadians can borrow to re-finance their homes to 80% of home value and limiting the availability of government-backed insured mortgages, seem to be having an effect on the construction sector. The weakness has been most evident in single-family starts, which declined for the second year running in 2014. A longer-term view shows that multi-family starts have almost returned to their 2007 peak — just 4.4% below in 2014, compared to single-family starts at 36% below. This is a similar story to the US, in which single-family starts have essentially stagnated after collapsing during the financial crisis. Again, we think that demographic changes are at work here as the upcoming millennial generation's preferences switch away from the traditional suburban single-family housing unit, towards inner city living. Looking to the year ahead, we expect both single and multi-family residential starts will return to modest growth before settling in the 4½-5% range out to end of the decade.

Non-residential building starts fell sharply this year as the final quarter saw starts come in far weaker than expected. It is likely that the oil price falling below $50pb will have impacted on confidence somewhat. The Canadian manufacturing sector saw starts fall by over 10% in 2014. A general decline in Canadian manufacturing led by under-investment over the last two decades has weakened demand for new real estate. Though we expect a turnaround in 2015 and 2016 as growth hits double-digits on the back of a wave of new demand created by lower exchange rates with the US, looking ahead we remain cautious that the relatively smaller manufacturing sector will not have the capacity to benefit from the weaker currency in the way it could have 20 years ago. In addition, increased competition from a booming Mexican manufacturing sector for the US export market will also act to constrain Canadian manufacturing potential.

Civil engineering starts, in contrast, closed 2014 with robust growth year-on-year of 22.3% in Q4. Nonetheless, over the year as a whole, starts were down almost 8% with falls in power infrastructure particularly sharp. Though we expect the declines to halt this year, before rebounding in 2016, we remain cautious. Again, the collapsing oil price is likely to have an effect on civil engineering construction, most notably mining construction. Even in the case of the oil price stabilising and re-gaining some of its previous level — which we incorporate into our baseline — the new long-term equilibrium oil price will likely squeeze the more technologically complex operations involved in refining oil sands, such that investment drops off and demand for new civil engineering projects is dampened. Furthermore, continuing political difficulties in the US involving the Keystone pipeline project add more uncertainty to the long-term outlook for civil engineering starts. Oil firms are ready to begin construction (both on the US and Canadian side) should the pipeline receive Congressional approval. Although this seems more likely in a Republican controlled house, until it passes, there is still considerable uncertainty.

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U.S. Type-of-Structure Forecasts

($ Billions USD)

	Actuals		Forecasts				
	2013	2014	2015	2016	2017	2018	2019
Single-family	146.205	156.884	187.689	206.673	222.176	233.739	245.492
Multi-family	42.833	37.721	45.595	51.535	51.985	54.892	56.416
TOTAL RESIDENTIAL	189.039	194.604	233.284	258.208	274.160	288.631	301.908
(Yr/yr % change)	*13.5%*	*2.9%*	*19.9%*	*10.7%*	*6.2%*	*5.3%*	*4.6%*
Hotels/Motels	6.999	7.093	9.354	10.608	10.815	10.967	11.312
Shopping/Retail	18.629	18.310	21.435	22.225	23.386	24.249	25.049
Parking Garages	1.987	1.799	2.065	2.091	2.142	2.202	2.268
Amusement	5.512	6.139	7.577	7.765	7.984	8.222	8.469
Private Offices	15.089	15.396	16.917	17.804	18.355	19.384	20.316
Govenmental Offices	9.529	10.807	11.129	11.279	11.296	11.558	11.736
Laboratories (Schools & Industrial)	1.738	2.376	2.416	2.704	2.904	3.075	3.234
Warehouses	4.152	6.874	6.732	6.977	7.157	7.301	7.358
Sports Stadium/Convention Center	2.779	5.968	3.446	3.457	3.680	3.825	3.934
Transportation Terminals	11.534	6.976	7.942	8.706	9.616	10.341	10.989
TOTAL COMMERCIAL	77.948	81.737	89.013	93.616	97.335	101.125	104.665
(Yr/yr % change)	*10.5%*	*4.9%*	*8.9%*	*5.2%*	*4.0%*	*3.9%*	*3.5%*
TOTAL INDUSTRIAL (manufacturing)	8.052	9.382	10.118	10.715	11.202	11.324	11.411
(Yr/yr % change)	*50.9%*	*16.5%*	*7.8%*	*5.9%*	*4.5%*	*1.1%*	*0.8%*
Religious	1.723	1.387	1.884	2.073	2.154	2.217	2.259
Hospitals/Clinics	14.991	13.147	17.514	19.694	21.727	23.436	24.706
Nursing Homes/Assisted Living	4.019	3.896	4.140	4.358	4.520	4.666	4.820
Libraries/Museums	2.224	2.237	2.774	2.939	2.935	3.001	3.052
Courthouse	1.294	0.828	1.128	1.423	1.454	1.491	1.514
Police/Fire	1.583	1.670	2.058	2.246	2.254	2.294	2.320
Prisons	1.254	1.506	2.138	2.043	2.116	2.238	2.287
Military	4.942	8.340	5.452	5.883	6.048	6.113	6.198
Educational Facilities	48.421	53.962	54.140	56.243	57.920	59.011	59.664
MED misc	2.580	2.332	3.386	3.541	3.770	3.987	4.197
TOTAL INSTITUTIONAL	83.031	89.305	94.615	100.442	104.898	108.455	111.019
(Yr/yr % change)	*-9.0%*	*7.6%*	*5.9%*	*6.2%*	*4.4%*	*3.4%*	*2.4%*
Miscellaneous Non-Res Building	3.258	3.899	4.838	5.049	5.160	5.384	5.565
TOTAL NON-RES BLDG	172.289	184.324	198.584	209.822	218.595	226.288	232.660
(Yr/yr % change)	*1.4%*	*7.0%*	*7.7%*	*5.7%*	*4.2%*	*3.5%*	*2.8%*
Airport	2.851	3.285	3.043	3.066	3.198	3.318	3.443
Roads	41.194	47.239	44.064	45.583	44.596	45.561	46.695
Bridges	10.664	11.291	11.384	11.458	11.513	11.731	11.984
Dams/Canal/Marine	5.363	5.084	3.772	3.359	3.361	3.457	3.526
Water & Sewage Treatment	23.702	26.235	29.127	28.572	29.458	30.483	31.396
Misc Civil (Power, etc.)	17.933	18.377	18.761	17.752	18.110	18.784	19.312
TOTAL ENGINEERING	101.707	111.512	110.151	109.791	110.236	113.332	116.356
(Yr/yr % change)	*3.6%*	*9.6%*	*-1.2%*	*-0.3%*	*0.4%*	*2.8%*	*2.7%*
TOTAL NON-RESIDENTIAL	273.996	295.836	308.735	319.612	328.831	339.620	349.016
(Yr/yr % change)	*2.2%*	*8.0%*	*4.4%*	*3.5%*	*2.9%*	*3.3%*	*2.8%*
GRAND TOTAL	463.035	490.440	542.019	577.820	602.991	628.251	650.924
(Yr/yr % change)	*6.5%*	*5.9%*	*10.5%*	*6.6%*	*4.4%*	*4.2%*	*3.6%*

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

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U.S. States, Total Construction Starts – CMD

States (alphabetical)	Actuals (Level in $ Billions USD) 2014	Forecasts (Year versus previous year % change) 2015	2016	2017	2018	2019
Alaska	$2.394	-48.5%	4.4%	3.8%	4.3%	3.4%
Alabama	$6.503	0.0%	6.6%	4.3%	4.1%	3.4%
Arkansas	$5.226	-27.0%	4.6%	5.2%	4.3%	3.5%
Arizona	$8.912	26.9%	14.9%	6.3%	4.9%	5.2%
California*	$49.525	31.1%	9.6%	2.9%	3.4%	3.2%
Colorado	$9.754	-0.3%	4.7%	5.5%	4.9%	4.1%
Connecticut	$5.076	9.1%	5.7%	2.7%	2.6%	1.7%
District Of Columbia	$3.689	-34.6%	7.6%	2.1%	2.4%	1.6%
Delaware	$1.629	24.9%	4.9%	4.9%	4.2%	3.4%
Florida*	$26.807	26.0%	6.4%	4.9%	4.1%	4.0%
Georgia	$15.845	18.5%	7.0%	5.6%	4.1%	3.4%
Hawaii	$2.684	-22.7%	6.0%	3.3%	3.2%	2.8%
Iowa	$6.529	-27.4%	6.0%	4.4%	4.1%	3.2%
Idaho	$3.102	-5.3%	6.1%	4.9%	3.9%	3.6%
Illinois	$16.098	0.8%	5.3%	3.0%	3.0%	2.5%
Indiana	$9.069	15.7%	5.1%	4.7%	4.2%	3.5%
Kansas	$4.758	-11.6%	4.8%	3.8%	3.6%	2.9%
Kentucky	$6.199	-17.7%	6.3%	4.8%	4.6%	3.8%
Louisiana	$9.451	-17.6%	6.5%	5.2%	4.6%	3.7%
Massachusetts	$9.929	18.5%	4.0%	2.3%	3.3%	2.5%
Maryland	$11.745	1.9%	8.0%	2.5%	2.7%	2.4%
Maine	$1.655	23.1%	4.6%	1.7%	2.0%	1.9%
Michigan	$9.777	1.1%	2.4%	2.9%	2.6%	2.3%
Minnesota	$8.392	13.4%	3.3%	3.7%	3.6%	3.1%
Missouri	$8.015	3.8%	3.1%	3.9%	3.5%	2.8%
Mississippi	$4.019	-8.5%	5.8%	5.1%	4.5%	3.7%
Montana	$1.501	-2.2%	9.4%	5.3%	4.6%	3.5%
North Carolina	$19.071	11.8%	6.0%	6.3%	5.7%	4.8%
North Dakota	$5.227	-59.6%	-9.3%	4.5%	5.0%	3.9%
Nebraska	$3.958	-16.7%	6.3%	4.7%	4.2%	3.3%
New Hampshire	$1.603	42.0%	8.7%	3.9%	3.2%	2.8%
New Jersey	$10.409	1.9%	2.2%	1.6%	2.8%	2.5%
New Mexico	$2.913	-3.4%	6.5%	4.1%	3.8%	3.0%
Nevada	$5.327	2.0%	11.4%	3.1%	1.9%	2.5%
New York*	$27.602	9.9%	6.0%	2.8%	3.9%	2.9%
Ohio	$12.105	24.1%	7.2%	4.3%	3.7%	2.8%
Oklahoma	$6.399	-1.8%	4.4%	5.2%	4.9%	4.1%
Oregon	$5.994	17.8%	4.6%	4.0%	4.1%	3.8%
Pennsylvania	$15.100	26.5%	6.3%	3.1%	3.4%	3.0%
Rhode Island	$1.066	29.3%	7.2%	2.6%	2.9%	2.2%
South Carolina	$9.435	-1.9%	3.5%	5.8%	5.1%	4.3%
South Dakota	$1.974	-24.9%	7.6%	5.1%	4.6%	3.7%
Tennessee	$9.650	15.6%	2.4%	5.0%	4.2%	3.6%
Texas*	$58.164	24.5%	7.5%	7.0%	6.3%	5.3%
Utah	$6.219	-0.2%	9.3%	4.8%	3.9%	3.4%
Virginia	$14.473	16.5%	8.1%	3.8%	3.4%	3.1%
Vermont	$0.889	18.0%	8.8%	4.5%	3.7%	2.8%
Washington	$14.515	-5.0%	5.7%	4.7%	4.4%	4.0%
Wisconsin	$6.411	18.7%	3.9%	2.8%	2.8%	2.3%
West Virginia	$1.583	17.5%	10.1%	3.4%	3.4%	2.5%
Wyoming	$2.071	-45.1%	13.1%	4.4%	4.1%	3.1%

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

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

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U.S. Four Largest States: Type-of-Structure Forecasts ($ Billions USD)								
		Actuals		Forecasts				
		2013	2014	2015	2016	2017	2018	2019
New York	Residential	10.082	6.770	9.044	10.124	10.382	10.932	11.300
	Non-res Building	14.940	14.469	14.813	15.673	16.277	16.827	17.280
	Engineering/Civil	5.038	6.364	6.470	6.341	6.395	6.577	6.747
	Total	30.060	27.602	30.327	32.138	33.054	34.336	35.328
(Yr vs previous yr % Change)		*24.1%*	*-8.2%*	*9.9%*	*6.0%*	*2.8%*	*3.9%*	*2.9%*
Florida	Residential	15.502	14.657	16.914	18.960	19.917	20.611	21.430
	Non-res Building	6.401	7.322	11.054	11.191	11.976	12.668	13.234
	Engineering/Civil	5.483	4.827	5.803	5.787	5.821	5.998	6.171
	Total	27.385	26.807	33.770	35.938	37.714	39.277	40.835
(Yr vs previous yr % Change)		*21.1%*	*-2.1%*	*26.0%*	*6.4%*	*4.9%*	*4.1%*	*4.0%*
Texas	Residential	27.630	30.763	37.341	42.158	46.607	50.627	54.314
	Non-res Building	18.050	17.053	23.480	24.180	25.063	25.898	26.573
	Engineering/Civil	8.852	10.349	11.565	11.443	11.519	11.877	12.226
	Total	54.532	58.164	72.387	77.781	83.189	88.402	93.113
(Yr vs previous yr % Change)		*9.0%*	*6.7%*	*24.5%*	*7.5%*	*7.0%*	*6.3%*	*5.3%*
California	Residential	14.565	16.216	21.913	26.206	26.804	27.682	28.611
	Non-res Building	19.529	22.450	29.177	31.060	32.424	33.621	34.669
	Engineering/Civil	11.073	10.859	13.817	13.854	13.966	14.394	14.803
	Total	45.167	49.525	64.908	71.120	73.194	75.697	78.083
(Yr vs previous yr % Change)		*-6.0%*	*9.6%*	*31.1%*	*9.6%*	*2.9%*	*3.4%*	*3.2%*

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

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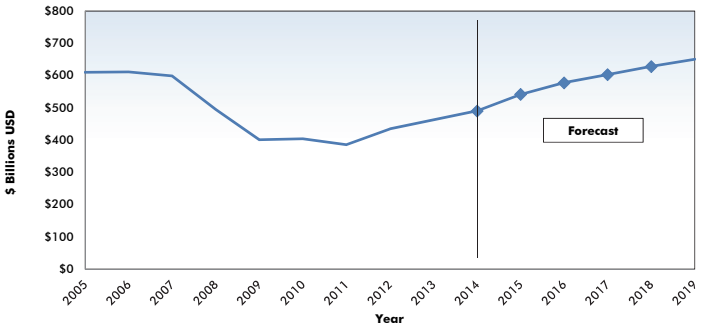
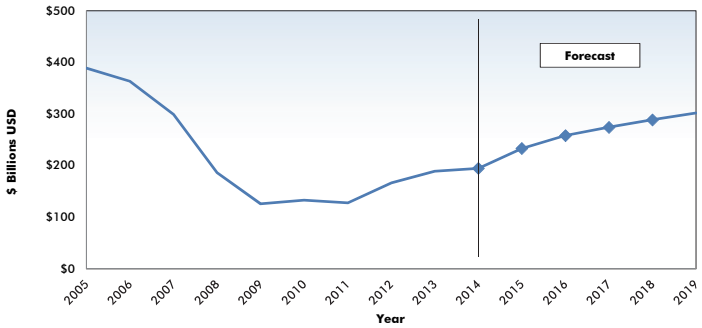
U.S. Total Construction Starts - CMD



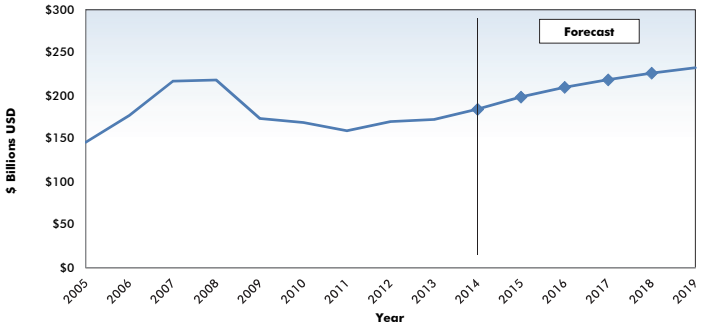
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

U.S. Total Residential Construction Starts - CMD



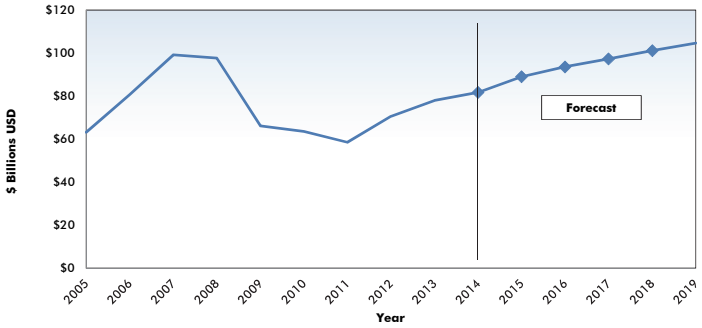
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

U.S. Total Non-Residential Building Starts - CMD



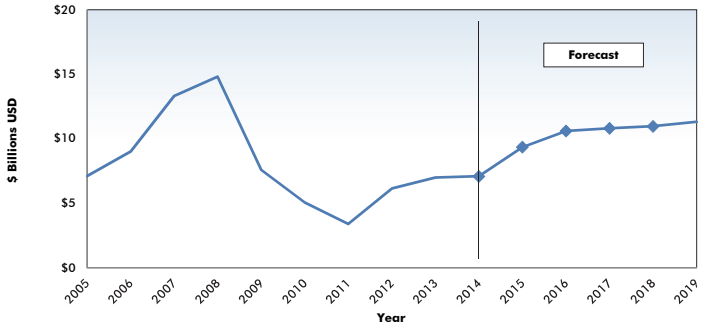
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

U.S. Total Commercial Construction Starts - CMD



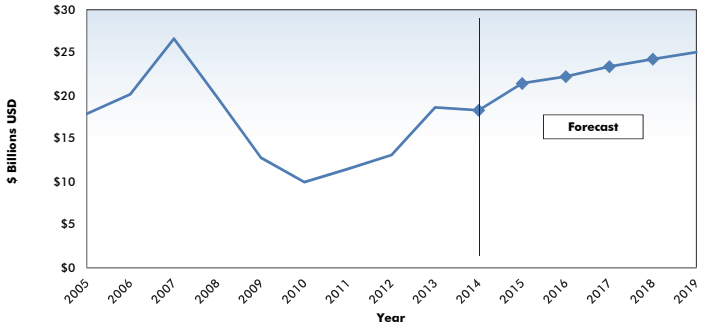
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

U.S. Hotel/Motel Construction Starts - CMD



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

U.S. Retail/Shopping Construction Starts - CMD



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

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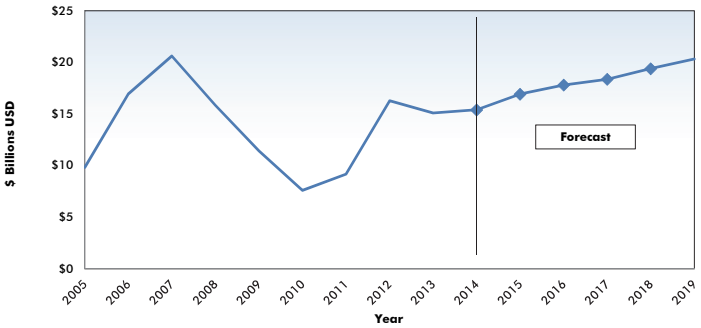
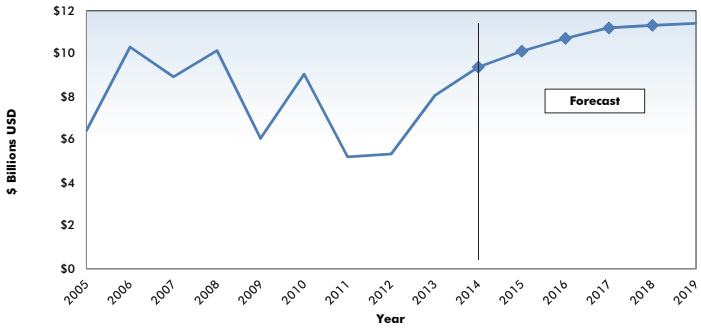
U.S. Private Office Building Construction Starts - CMD



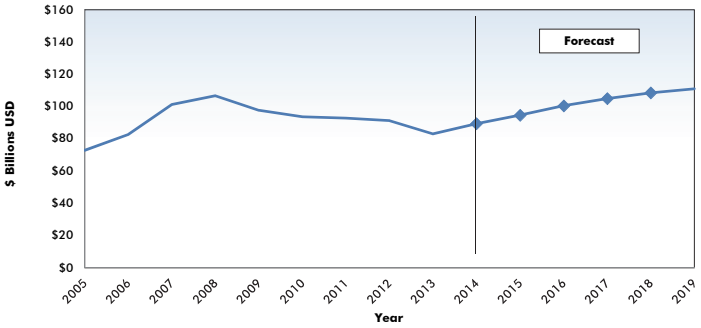
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

U.S. Total Industrial/Manufacturing Construction Starts - CMD



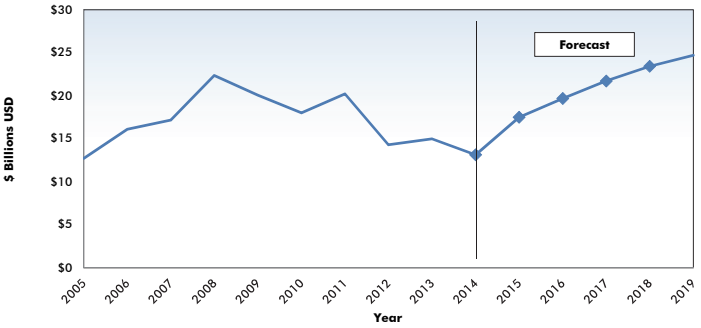
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

U.S. Total Institutional Construction Starts - CMD



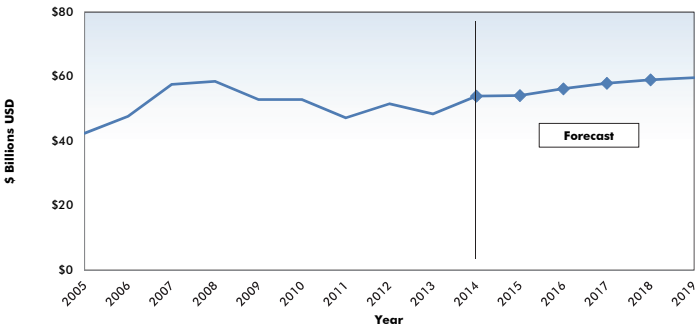
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

U.S. Hospital and Clinic Construction Starts - CMD



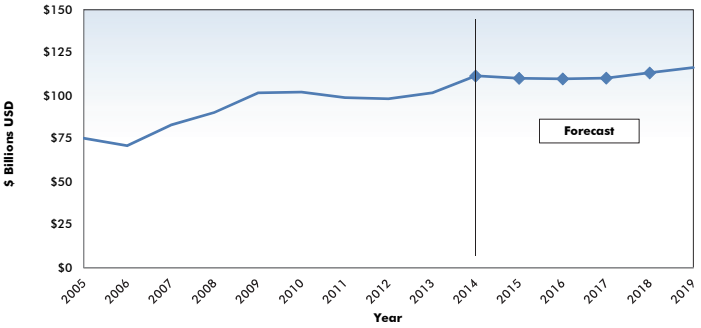
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

U.S. Total Educational Construction Starts - CMD



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

U.S. Total Heavy Engineering/Civil Construction Starts - CMD



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

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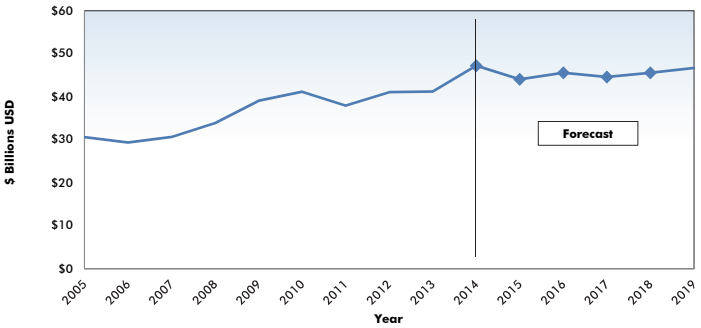
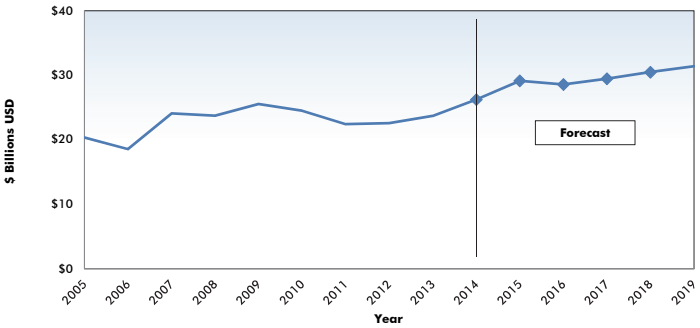
U.S. Roadwork Construction Starts - CMD



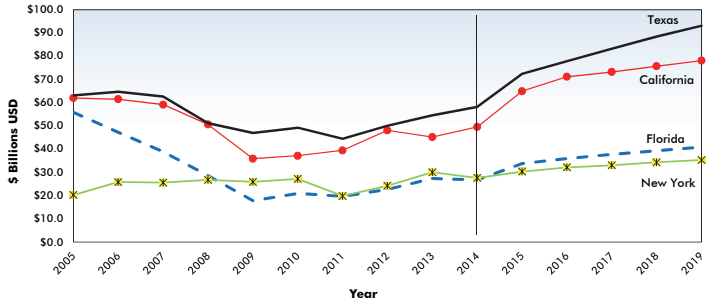
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

U.S. Water and Sewage Treatment Construction Starts - CMD



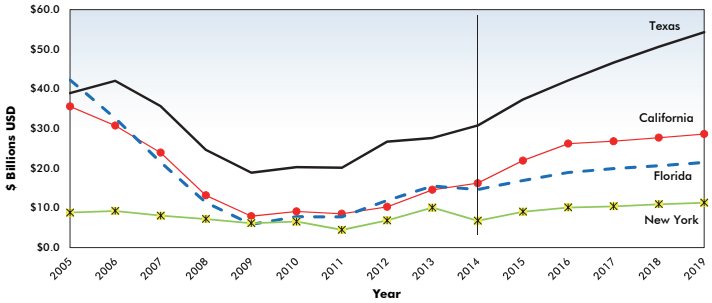
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

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



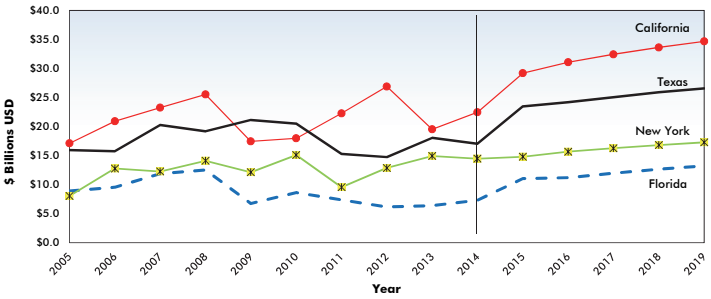
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

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



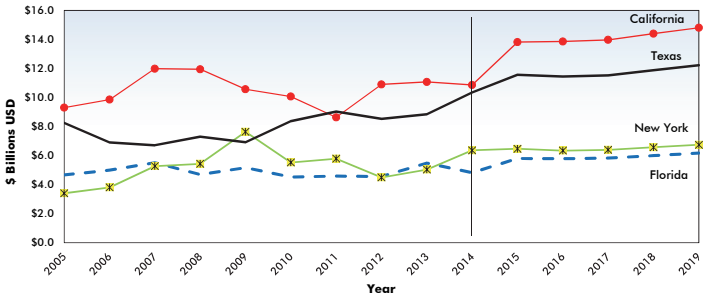
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

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



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

U.S. Four Largest States: Total Engineering/ Civil Construction Starts - CMD



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

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Canada Type-of-Structure Forecasts

($ Billions CAD)

	Actuals		Forecasts				
	2013	2014	2015	2016	2017	2018	2019
Single-family	14.198	14.126	15.806	16.883	17.365	18.128	18.847
Multi-family	9.332	9.795	9.191	9.323	9.898	10.181	10.547
TOTAL RESIDENTIAL	23.530	23.921	24.997	26.207	27.262	28.308	29.394
(Yr/yr % change)	*-9.8%*	*1.7%*	*4.5%*	*4.8%*	*4.0%*	*3.8%*	*3.8%*
Hotels/Motels	1.033	0.327	0.459	0.448	0.507	0.535	0.573
Private Offices	2.319	2.153	2.196	2.381	2.467	2.766	2.998
Govenmental Offices	1.442	1.502	1.481	1.627	1.626	1.728	1.802
Shopping/Retail	1.877	1.539	1.604	1.703	1.910	2.100	2.306
Retail Miscellaneous	0.521	0.378	0.456	0.518	0.563	0.610	0.655
Parking Garages	0.068	0.039	0.097	0.087	0.099	0.112	0.120
Amusement	2.707	1.086	1.513	1.526	1.686	1.822	1.948
Warehouses	0.556	0.664	0.637	0.732	0.801	0.872	0.937
TOTAL COMMERCIAL	10.521	7.687	8.443	9.023	9.660	10.545	11.341
(Yr/yr % change)	18.0%	-26.9%	9.8%	6.9%	7.1%	9.2%	7.5%
TOTAL INDUSTRIAL (manufacturing)	1.336	1.200	1.456	1.605	1.724	1.842	1.949
(Yr/yr % change)	*-68.3%*	*-10.2%*	*21.3%*	*10.3%*	*7.4%*	*6.8%*	*5.8%*
Religious	0.118	0.104	0.127	0.156	0.166	0.175	0.178
Hospitals/Clinics	1.134	1.535	2.114	2.268	2.428	2.642	2.856
MED misc	0.671	0.542	0.863	1.009	1.066	1.128	1.150
Transportation Terminals*	0.306	0.362	0.381	0.452	0.507	0.541	0.560
Police/Fire	0.674	0.687	0.726	0.864	0.952	1.020	1.042
Educational Facilities	3.885	3.071	3.506	3.956	4.302	4.543	4.648
TOTAL INSTITUTIONAL	6.788	6.300	7.717	8.705	9.421	10.049	10.434
(Yr/yr % change)	*-15.6%*	*-7.2%*	*22.5%*	*12.8%*	*8.2%*	*6.7%*	*3.8%*
TOTAL NON-RES BUILDING	18.646	15.188	17.616	19.333	20.805	22.436	23.723
(Yr/yr % change)	*-12.0%*	*-18.5%*	*16.0%*	*9.7%*	*7.6%*	*7.8%*	*5.7%*
Bridges	2.026	1.544	2.294	2.479	2.526	2.630	2.694
Dams/Canal/Marine	0.072	0.094	0.164	0.140	0.140	0.150	0.154
Water & Sewage Treatment	3.360	3.276	3.498	3.760	3.843	4.045	4.130
Roads	*6.316*	*6.094*	*6.794*	*7.095*	*7.160*	*7.800*	*8.182*
Power Infrastructure	12.004	5.776	7.930	8.788	9.462	9.607	9.849
All Other Civil (Oil & Gas etc.)	23.257	26.618	22.881	24.672	26.085	26.669	27.446
TOTAL ENGINEERING	*47.035*	*43.403*	*43.562*	*46.935*	*49.215*	*50.901*	*52.456*
(Yr/yr % change)	51.7%	-7.7%	0.4%	7.7%	4.9%	3.4%	3.1%
TOTAL NON-RESIDENTIAL	65.681	58.591	61.177	66.268	70.020	73.337	76.180
(Yr/yr % change)	25.9%	-10.8%	4.4%	8.3%	5.7%	4.7%	3.9%
GRAND TOTAL	89.211	82.512	86.174	92.474	97.282	101.645	105.574
(Yr/yr % change)	14.0%	-7.5%	4.4%	7.3%	5.2%	4.5%	3.9%

* '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: "Insights" CMD / Forecasts: Oxford Economics and CMD.
Chart: CMD.

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Canadian Provinces, Total Construction Starts – CMD

Regions/Provinces (East to West)	Actuals (Level in $ Billions CAD) 2014	Forecasts (Year versus previous year % change) 2015	2016	2017	2018	2019
Atlantic region	$17.780	-67.9%	8.4%	4.4%	2.8%	2.4%
Quebec	$11.062	44.0%	5.5%	5.5%	4.1%	3.6%
Ontario	$20.057	47.3%	9.0%	5.0%	4.9%	4.1%
Manitoba	$2.282	37.4%	0.7%	4.9%	4.4%	3.7%
Saskatchewan	$5.937	-47.6%	1.7%	4.8%	4.5%	3.8%
Alberta	$13.410	7.3%	11.9%	5.6%	5.1%	4.4%
British Colombia	$11.983	19.9%	3.5%	5.4%	4.1%	3.8%

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

Canada Four Largest Provinces: Type-of-Structure Forecasts

($ Billions CAD)

		Actuals 2013	2014	Forecasts 2015	2016	2017	2018	2019
Quebec	Residential	3.512	3.207	3.299	3.637	3.772	3.915	4.060
	Non-res Building	4.019	3.385	3.087	3.385	3.662	3.923	4.127
	Engineering/Civil	3.175	4.470	9.538	9.772	10.284	10.601	10.922
	Total	10.705	11.062	15.924	16.794	17.718	18.439	19.109
(Yr vs previous yr % Change)		*-18.1%*	*3.3%*	*44.0%*	*5.5%*	*5.5%*	*4.1%*	*3.6%*
Ontario	Residential	8.238	8.573	9.829	10.086	10.500	10.880	11.292
	Non-res Building	5.591	4.213	7.372	8.074	8.630	9.310	9.844
	Engineering/Civil	7.289	7.272	12.347	14.060	14.693	15.280	15.784
	Total	21.118	20.057	29.548	32.220	33.823	35.469	36.920
(Yr vs previous yr % Change)		*-10.1%*	*-5.0%*	*47.3%*	*9.0%*	*5.0%*	*4.9%*	*4.1%*
Alberta	Residential	4.108	4.269	4.006	4.212	4.384	4.586	4.773
	Non-res Building	2.978	2.314	2.378	2.621	2.814	3.077	3.285
	Engineering/Civil	19.145	6.826	8.006	9.264	9.796	10.196	10.588
	Total	26.231	13.410	14.390	16.097	16.994	17.860	18.646
(Yr vs previous yr % Change)		*54.6%*	*-48.9%*	*7.3%*	*11.9%*	*5.6%*	*5.1%*	*4.4%*
British Columbia	Residential	4.576	5.290	5.474	5.721	5.970	6.181	6.419
	Non-res Building	2.918	3.511	3.049	3.330	3.608	3.886	4.120
	Engineering/Civil	8.045	3.183	5.840	5.817	6.087	6.234	6.383
	Total	15.539	11.983	14.363	14.868	15.665	16.302	16.922
(Yr vs previous yr % Change)		*-7.2%*	*-22.9%*	*19.9%*	*3.5%*	*5.4%*	*4.1%*	*3.8%*

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

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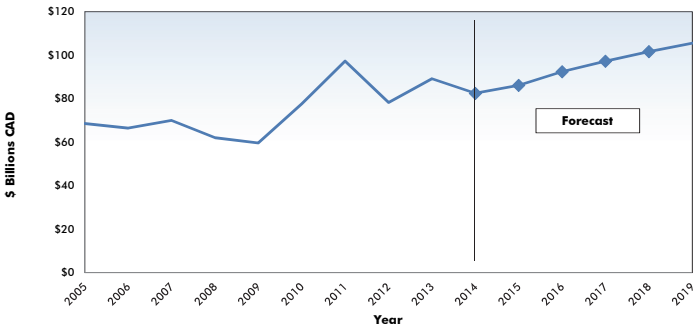
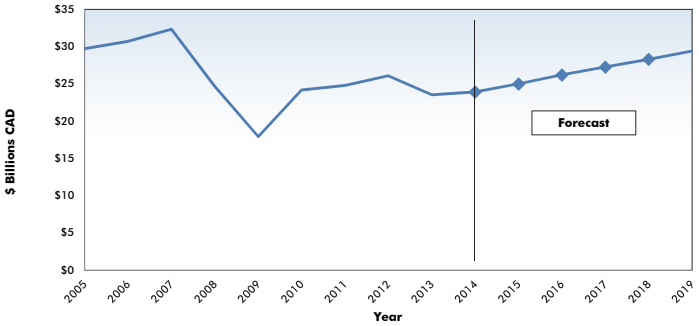
Canadian Total Construction Starts - CMD



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

Canadian Residential Construction Starts - CMD



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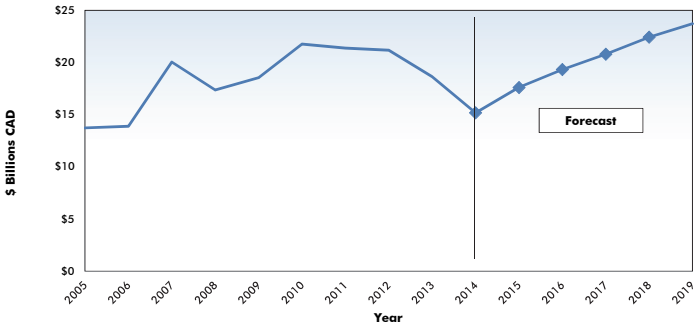
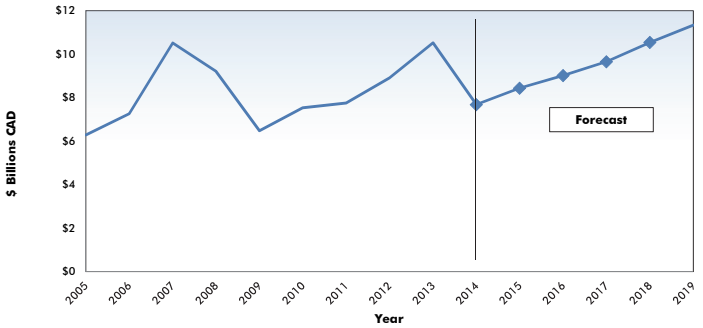
Canadian Non-Residential Building Starts - CMD



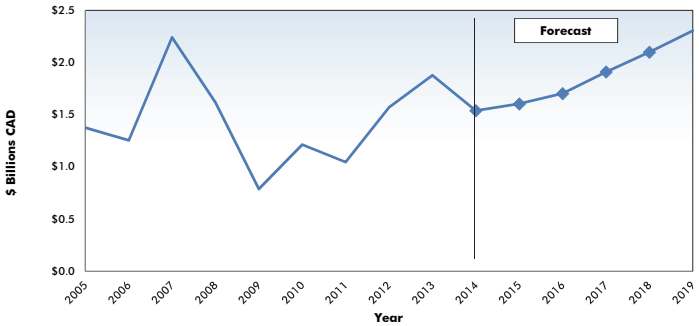
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

Canadian Commercial Construction Starts - CMD



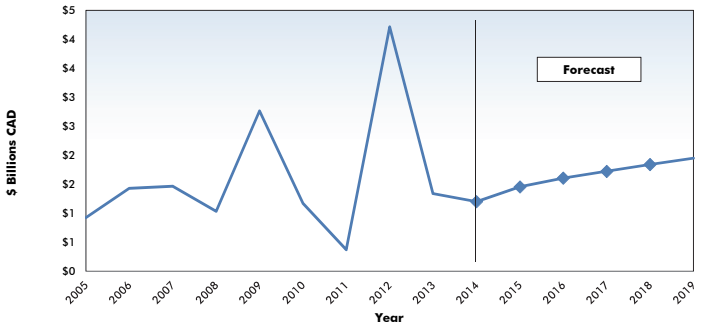
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

Canadian Shopping/Retail Construction Starts - CMD



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

Canadian Industrial Construction Starts - CMD



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

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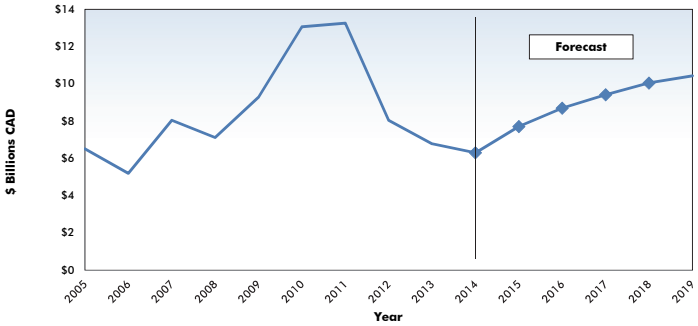
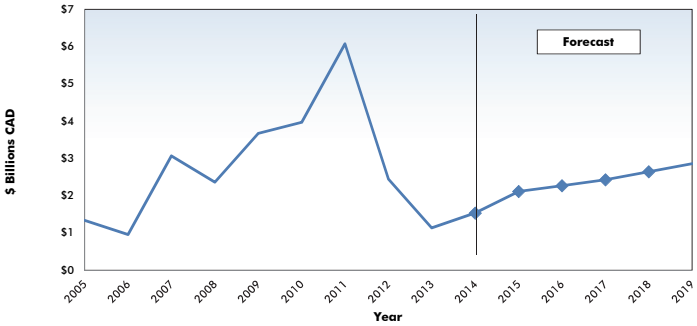
Canadian Institutional Construction Starts - CMD



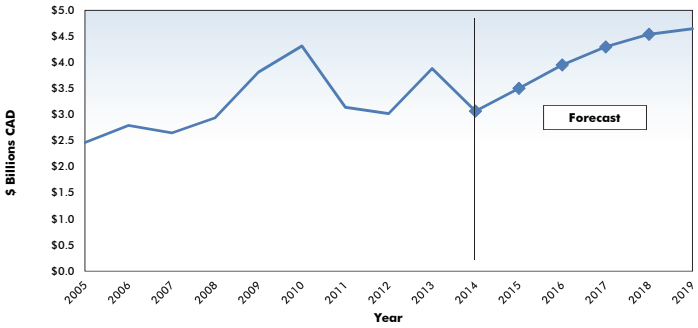
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

Canadian Hospital/Clinic Construction Starts - CMD



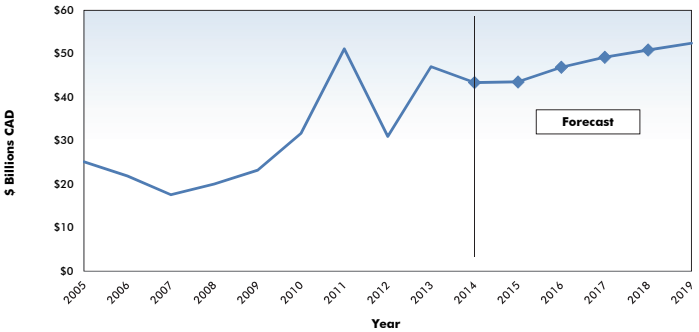
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

Canadian Education Construction Starts - CMD



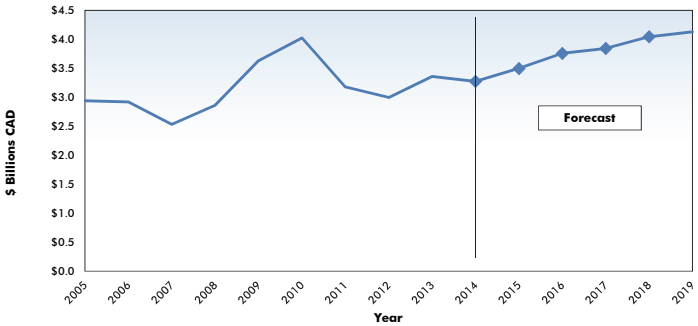
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

Canadian Engineering Construction Starts - CMD



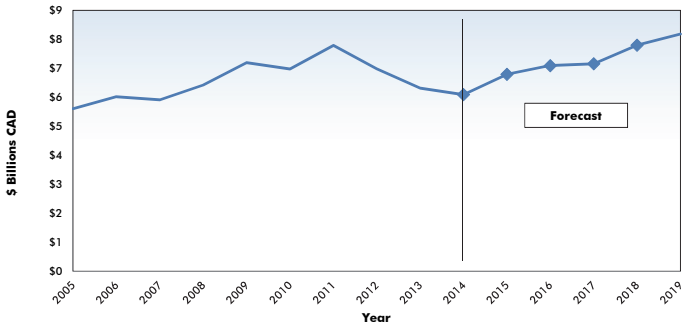
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

Canadian Water and Sewage Construction Starts - CMD



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

Canadian Roadwork Construction Starts - CMD



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

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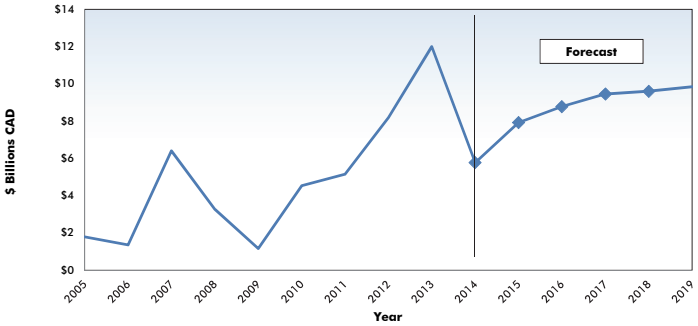
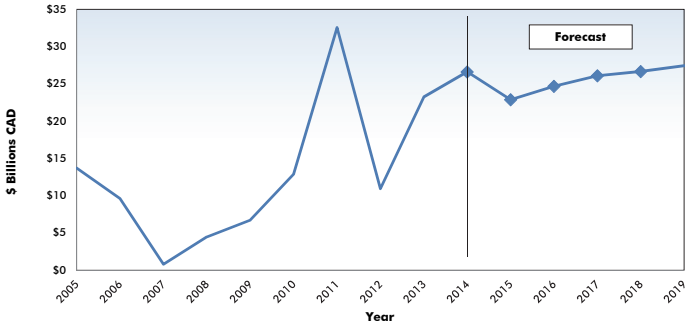
Canadian Power Infrastructure Construction Starts - CMD



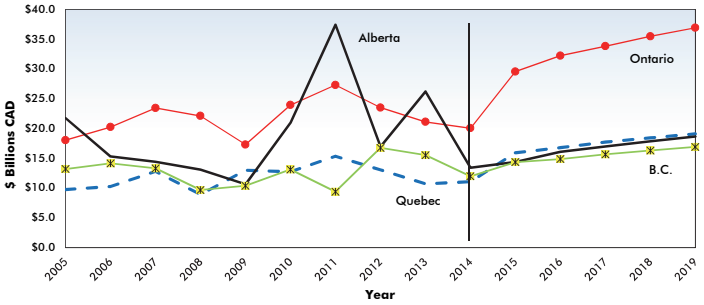
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

Canadian Oil and Gas Plants, Pipelines Construction Starts - CMD



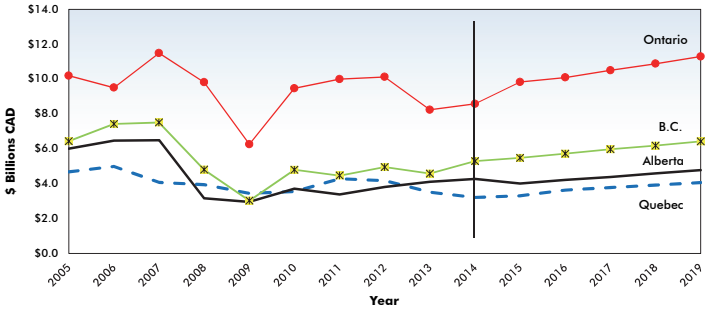
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

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



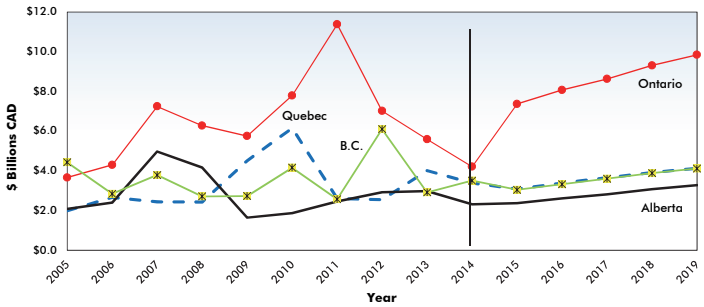
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

Canada Four Largest Provinces: Total Residential Construction Starts – CMD



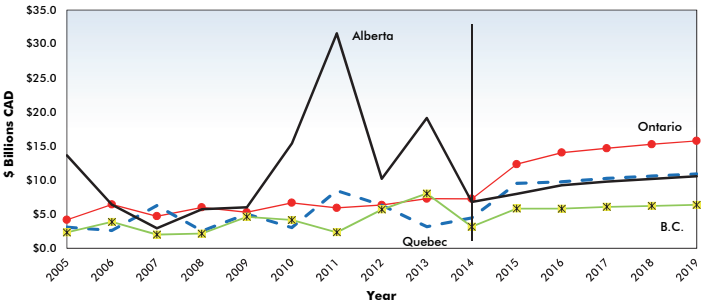
Source of actuals: "Insight" CMD / Forecasts: Oxford Economics and CMD / Chart: CMD.

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



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

Canada Four Largest Provinces: Total Engineering/ Civil Construction Starts - CMD



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

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