

Image courtesy of Ministry of Transportation and Infrastructure

Highway travellers in or through Malakwa will have a safer drive along the Trans-Canada Highway as the construction to replace the Malakwa Bridge and four-laning has finished ahead of schedule. The heavily used route is British Columbia's main gateway to the rest of Canada, and is vital to sustaining travel, tourism and trade. The project improves safety for all travellers, including cyclists and pedestrians.

# BRITISH COLUMBIA MAJOR PROJECTS INVENTORY

**SECOND QUARTER 2016** 





### **ABOUT THIS REPORT**

#### British Columbia Major Projects Inventory Second Quarter 2016

Major Projects Inventory as of June 30, 2016

Publisher: Labour Market and Information Division, Ministry of Jobs, Tourism and Skills Training and Minister Responsible for Labour

Demographic and Building Statistics: Statistics Canada and B.C. Stats

Major projects data collection and highlights by Rene Corcoran, Research Contractor

Report prepared by Labour Market and Information Division staff

While information sources are checked regularly, the Government of British Columbia and its contractors are not responsible for any errors or omissions in this publication.

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#### About this Report

The presentation of the B.C. Major Projects Inventory (MPI) report has been redesigned to include broad construction trends and current economic activities since the first quarter of 2016 issue.

The objectives of this report are to analyze the updates to the MPI and to provide additional context on changes to economic conditions and construction activities. These snapshots of current economic activities are provided to help readers to form expectations of the construction activities into the next quarter. Note that the economic indicators are based on the most recent data available during the preparation of this report, not based on what would have been available in June 2016.

The detailed project listings are no longer included in this report since they are available in the searchable Excel database which is published on the MPI website (<a href="www.majorprojectsinventory.com">www.majorprojectsinventory.com</a>) together with this report.

Feedback on the report redesign should be addressed to Grace Lee (<u>Grace.Lee@gov.bc.ca</u>), Labour Market Information Office (LMIO).

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#### ABOUT THE MAJOR PROJECTS INVENTORY.

The B.C. Major Projects Inventory (MPI), published quarterly, provides summary information on major projects in the Province of British Columbia. The MPI includes a listing of private and public sector construction projects in B.C. with an estimated capital cost of \$15 million (Cdn.) or greater (\$20 million or greater within the Lower Mainland–Vancouver area).

Approximately two-thirds of existing projects receive an update each quarter. New projects are added to the list every quarter. Projects on hold for longer than two years are removed from the publication. Completed projects are removed from the list in the following quarter.

Information collected in the MPI includes:

Project identification	Project name, description, specific and regional location, geographic coordinates, developer, contact information, project type and project category
Project status	<ul> <li>Proposed, under construction, completed, or on hold</li> <li>Proposed stages</li> <li>Start and completion dates (if available)</li> <li>Update activity on project status</li> <li>Environmental assessment stage</li> </ul>
Project size	Estimated capital cost (if available)
Other project characteristics	Construction type, construction subtype, public sector projects, clean energy projects and/or green (i.e. LEED) building projects, First Nations' agreements, the number of construction jobs and operating jobs.

While effort is made to maintain a comprehensive project list that includes the most current publicly available information, it is important to note that projects are constantly added and re-evaluated by industry. Not all major projects are included in the MPI. Projects must be known to be included, and some project information is not published due to confidentiality requirements.

#### **Sources of MPI Information**

Information sources include print and electronic media, developers, architects, general contractors, and government agencies (provincial, regional, municipal) as well as occasional site visits. Projects that are under consideration or proposed to be funded by the provincial government may be listed where there is public information about such projects. The description may indicate the status of provincial funding applications if it is available from public information.

#### **Project Location**

Projects are listed within the eight economic development regions: Vancouver Island/Coast, Mainland/Southwest (Vancouver area), Thompson-Okanagan, Kootenay, Cariboo, North Coast, Nechako, and Northeast. A map showing the location of the regions and main population centres is included in the regional sections of the MPI. Projects are also listed according to the nearest population centre, which could be an unincorporated centre or a local government, (e.g., a municipality).

#### ABOUT THE MAJOR PROJECTS INVENTORY.

#### **Estimated Cost**

Cost estimates are general estimates from the information sources used and are not necessarily produced in a consistent manner. The estimated costs are revised when new information is available. All estimates are recorded in millions of dollars.

#### **Start and Finish Dates**

Start and finish dates for proposed projects are based on estimates from the sources used, or in some cases, reasonable assumptions. These dates are revised as new information becomes available.

#### **Project Status**

Projects are listed by status: proposed, under construction, completed, or on hold. Projects that are on hold for longer than two years are normally removed from the publication (although retained in our database). Canceled projects are noted in the project description as "canceled" and noted in a new field - Update Activity as "cancelled-removing next issue". Canceled projects and completed projects in this quarter will be removed from the next issue of the MPI.

#### **Sustainable Building Design**

Information on sustainable building design is identified as well as construction projects that are registered and certified under a recognized green building rating system (e.g., Leadership in Energy and Environmental Design (LEED®), Green Globes). LEED buildings provide an environmentally responsible standard for energy efficiency in the home and workplace. This designation has been added to the project description to promote awareness of the benefits of green buildings.

#### **First Nations Affiliation**

Information related to First Nations' involvement in projects is based on news releases and published project information that is publicly available. The information is consistent with the information maintained in the First Nations Economic Development Database (FNEDD; www.fnedd.ca).

#### ABOUT THE MAJOR PROJECTS INVENTORY.

#### New data concepts added to this issue are as follows:

#### **Construction Type**

Projects are grouped by five industry-standard construction types:

- a.) commercial;
- b.) residential;
- c.) industrial;
- d.) infrastructure; and,
- e.) institutional.

#### **Construction Subtype**

Projects are also grouped by construction subtypes. There are 21 construction subtypes within the five industry-standard construction types. The classifications for the construction subtypes are included in section 14 of definitions of key terms. Note that the construction subtype replaces the field of Industry Construction Classification previously used.

#### **Project Category**

Projects Category listed the seven industrial categories:

- a.) manufacturing;
- b.) mining, oil and gas extraction;
- c.) other services;
- d.) public services;
- e.) residential or commercial;
- f.) transportation and warehousing; and,
- g.) Utilities (including sewage treatment)

#### **Environmental Assessment Stage**

The stages of environmental assessment for each project undergoing review under the *B.C. Environmental Assessment Act* are added to this issue.

#### **Latitude and Longitude**

Fields Latitude and longitude in the format of Degrees minutes seconds (DMS) are now added.

#### Telephone

Contact number of the project developer or representative.

#### **Update Activity**

Readers can search for and select projects based on the following five criteria:

- a.) new proposed projects;
- b.) construction started this quarter;
- c.) cancelled-removing next issue;
- d.) project added-under construction; and,
- e.) completed this quarter-removing next issue.

### B.C. MAJOR PROJECTS HIGHLIGHTS - Q2 2016

#### 1. B.C. Major Projects Highlights – Q2 2016

This issue of the B.C. Major Projects Inventory lists 24 new proposed projects over \$15 million (M) for the second quarter of 2016, with available capital cost estimates totaling approximately \$716 M in potential new capital investment, if all the projects proceed.

Twenty new major projects started construction in the second quarter, with an estimated value of \$1.2 billion (B). Among the larger projects started are the \$312 M Penticton Hospital Redevelopment, and the \$210 M Narrows Inlet Hydro Project in Sechelt.

Twenty-five projects completed construction in the second quarter, with an estimated capital cost of \$948 M. The largest project is the \$217 M McLymont Creek Hydroelectric Project in Stewart, followed by the \$49 M Centennial Secondary School in Coquitlam.

All capital costs in this report are estimates and therefore subject to change. This is particularly applicable in the early stages of a project proposal. Some capital costs are not included because they were not available at press time or the developer or owner requested that no capital cost be shown.

The capital cost of all major projects currently under construction in B.C. is estimated at approximately \$77.9 billion, up slightly from the \$77.4 B reported in the first quarter of 2016. Many major project proposals listed are in very preliminary stages and are not approved for construction, therefore capital cost estimates should be viewed with caution. The available capital cost of proposed projects is estimated at \$326.1 B, down from \$329.3 B in the previous quarter. Approximately \$34.2 B of projects are judged to be 'on hold' for the time being.

Figure 1 B.C. MPI Highlights

909	Number of total major projects
\$439.3 B	Value of all projects
451	Number of total proposed projects
\$326.1 B	Value of proposed projects
341	Number of projects under construction
\$77.9 B	Value of projects under construction (Appendix 2)
25	Number of projects completed
\$948 M	Value of projects completed (Appendix 3)
24	Number of new proposed projects in Q2 2016
\$716 M	Value of newly proposed projects (Appendix 1)

### B.C. MAJOR PROJECTS INVENTORY - Q2 2016

### 2. B.C. Major Projects Inventory– Q2 2016

By Projects Category, Construction Type or Subtype

Exhibit 2.1 Estimated Cost Trends in B.C. Major Projects, by Project Category (\$ M)

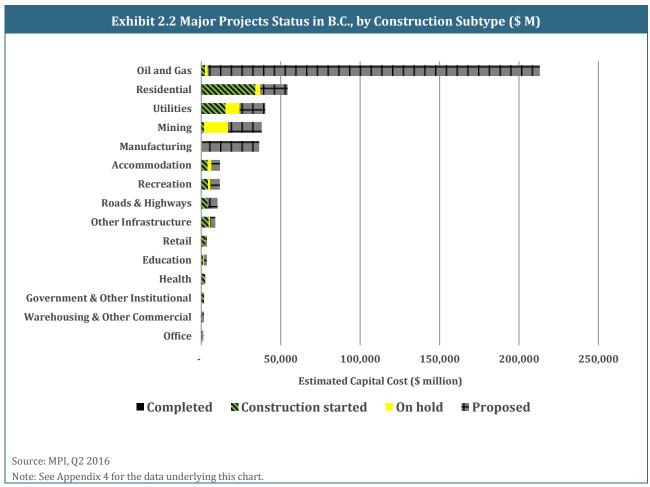
Project Category	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change from previous quarter	Change from previous year
Mining, Oil & Gas Extraction	197,830	201,430	203,236	196,810	201,272	2.3%	1.7%
Residential/Commercial	70,490	71,458	74,234	72,824	72,683	-0.2%	3.1%
Transportation & Warehousing	60,055	57,525	66,014	72,767	69,088	-5.1%	15.0%
Manufacturing	51,231	46,491	46,521	36,454	36,454	0.0%	-28.8%
Utilities	43,143	42,473	43,014	40,212	40,251	0.1%	-6.7%
Public Services	7,732	7,966	8,039	8,301	7,753	-6.6%	0.3%
Other Services	9,958	11,428	11,442	11,687	11,752	0.6%	18.0%
Other	17,259	10,918				-	-
Total	457,698	449,689	452,500	439,055	439,253	0.1%	-4.0%

Source: MPI, Q2 2016

The capital cost of B.C. major projects increased slightly in the second quarter of 2016, totalling \$439.3 B; however, this is a decrease of 4 percent compared to the same quarter last year.

The largest year-over-year increase occurred in transportation and warehousing (+15%) and other services (+18%), primarily as a result of newly included proposed projects: GCT Vanterm Densification Project (\$160 M), Alex Fraser Bridge Interchange (\$30 M), and Playland Theme Park (\$120 M).

### B.C. MAJOR PROJECTS INVENTORY - Q2 2016



- Low commodity prices (see exhibit) have resulted in a number of Oil and Gas, Mining, and Petrochemical manufacturing projects being delayed or put on hold.
- In the second quarter of 2016, proposed Oil and Gas projects' share of estimated capital costs remains high with a total of \$213 B in the inventory.
- Proposed costs for Oil and Gas represent approximately 50 percent of the total costs for all projects in the B.C. MPI.
- Approximately 77 percent of capital costs for the proposed Oil and Gas projects are in the North Coast region, 15 percent in the Vancouver Island/Coast region, 5 percent in the Northeast region, 2 percent in the Cariboo region and 1 percent in the Mainland/Southwest region.
- The share of capital costs for Residential projects is relatively large in the Vancouver Island, Thompson-Okanagan, and the Mainland/Southwest regions.
- While the North Coast region had the highest total costs in Mining projects, the Nechako region and the Kootenay region had Mining projects as the largest shares in total costs among all construction subtypes.
- Utility projects continue to be significant in the Northeast region, largely led by the Site C Dam (\$8.3B) project.
- There are large shares of Roads & Highways construction started in the regions of Mainland/ Southwest, Thompson-Okanagan and Cariboo.

# B.C. MAJOR PROJECTS INVENTORY – Q2 2016

Construction Type & Subtype	Vancouver Island/ Coast	Mainland/ Southwest	Thompson -Okanagan	Kootenay	Cariboo	North Coast	Nechako	Northeast	Total
Residential Subtotal:	11,167	27,862	10,475	80			100		49,684
Primarily residential	8,167	18,480	9,025	80			100		35,85
Mixed use	3,000	9,382	1,450						13,83
Commercial Subtotal:	2,537	19,435	5,836	4,902	1,435	30		540	34,71
Mixed use	362	4,310							4,67
Accommodation	346	4,820	3,299	2,302	980				11,74
Recreation	121	6,668	2,235	2,600	73				11,69
Retail	883	1,950	287					500	3,62
Office	285	1,017	15						1,31
Warehousing		60							6
Other Commercial	540	610			382	30		40	1,60
Industrial Subtotal:	32,388	2,803	1,864	3,226	7,698	212,193	5,958	21,506	287,63
Mining	328	160	1,834	3,016	3,183	19,683	5,958	3,877	38,03
Oil & Gas	32,000	2,593			4,500	160,450		13,600	213,14
Manufacturing - Wood Products	60		30			60		29	17
Manufacturing - Petrochemical						32,000		4,000	36,00
Other Manufacturing		50		210	15				27
Institutional & Government Subtotal:	3,470	3,046	1,237	19		50		27	7,84
Education	1,637	1,753	89	19				27	3,52
Health	606	1,096	844			50			2,59
Government buildings	1,207	197	269						1,67
Other Institutional & Government	20		35						5
Infrastructure Subtotal:	11,686	19,443	3,401	887	1,534	6,479	786	15,153	59,36
Utilities	8,777	6,753	1,904	887	1,070	5,134	741	14,985	40,25
Roads & Highways	1,242	7,042	1,301		464	20	45	168	10,28
Other Transportation	1,650	5,648	196			1,325			8,81
Other Infrastructure	17								1
Total	61,248	72,589	22,813	9,114	10,667	218,752	6,844	37,226	439,25

### B.C. MAJOR PROJECTS INVENTORY - Q2 2016

#### **By Project Status**

Exhibit 2.4 Estimated Cost Trends in B.C. Major Projects, by Project Status (\$ M)

Status	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change from previous quarter	Change from previous year
Proposed	350,110	338,035	341,636	329,319	326,103	-1.0%	-6.9%
Construction started	72,335	79,570	75,422	77,440	77,964	0.7%	7.8%
Completed	10,213	616	3975	1094	948	-13.3%	-90.7%
On hold	25,040	31,468	31,467	31,202	34,238	9.7%	36.7%
Total	457,698	449,689	452,500	439,055	439,253	0.1%	-4.0%

Source: MPI, Q2 2016

Exhibit 2.5 Summary of B.C. Major Projects (by Project Status)

	Estimated Capital Cost (\$M)	Percentage of Total	Number of Projects	Average Project Value (\$M)	Average Years in Inventory
Proposed	326,103	74%	451	836	4.6
Preliminary/Feasibility	80,893	18%	96	1,156	4.1
Consultation/Approvals	204,799	47%	261	864	5.0
Permitting	8,291	2%	22	436	2.9
Tender/Preconstruction	4,856	1%	36	143	3.8
Stage Unknown	27,264	6%	36	909	5.3
On Hold	34,238	8%	92	389	9.2
Construction Started	77,964	18%	341	233	6.4
Completed	948	0.2%	25	38	4.3
Total	439,253	100%	909	523	5.7

Source: MPI, Q2 2016

Note: Average project value is the average of those projects for which there is a cost estimate. An average year in inventory is the average time span between the projects as recorded in the MPI and the updated date (June 30, 2016).

### B.C. MAJOR PROJECTS INVENTORY - Q2 2016

Exhibit 2.6 Estimated Cost of Regional Major Projects, by Project Status (\$ M) Vancouver 46,851 11,605 61 2,731 61,248 -0.1%0.3% Island/Coast Mainland/ 34,376 34,785 497 2,931 72,589 0.6% -6.8% Southwest Thompson-4,631 14,006 144 22,813 0.0% -5.8% 4,032 Okanagan Kootenay 3,603 3,180 9,114 0.1% -12.9% 2.331 Cariboo 8,804 480 1,383 10,667 0.0% -8.4% **North Coast** 202,717 1,201 217 218,752 -0.1% -4.6% 14,617 Nechako 4,261 886 1,697 6,844 -2.7% 4.3% Northeast 22,132 11,398 29 3,667 37,226 0.4%1.6%

948

34,238

439,253

0.1%

-4.0%

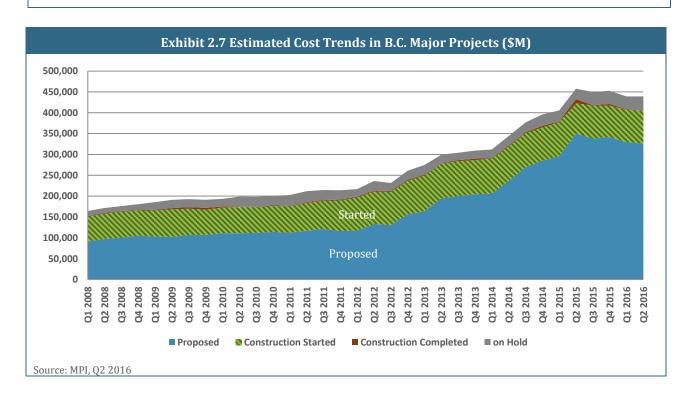
Source: MPI, Q2 2016

326,103

Total

North Coast has a large inventory of proposed projects, primarily LNG proposals.

77,964



# 3. British Columbia's Economy

#### **Exhibit 3.1 Economic Activity**

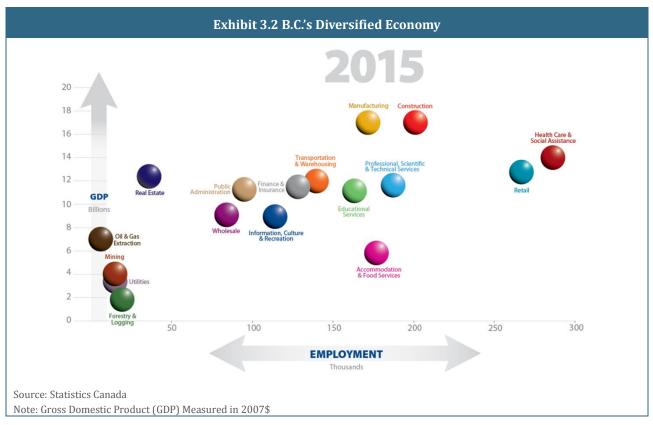
	2015f	2016f	2017f	2018f	2019f
Real GDP	+2.3 %	+2.4 %	+2.3 %	+2.3 %	+2.3 %

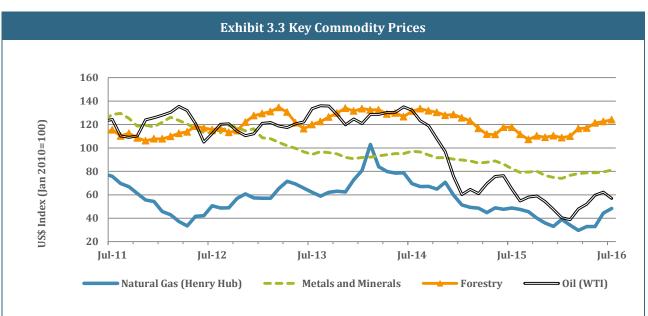
Source: B.C. Budget and Fiscal Plan 2015/16 – 2017/18

	Most Recent Period	Amount	Change from previous month	Change from previous year	Data Type
Retail trade (\$ M)	Jun-16	6,207	+0.2%	+5.2%	seasonally adjusted
Manufacturing (\$ M)	Jul-16	3,791	+2.2%	+4.0%	seasonally adjusted
Residential - building permits (\$ M)	Jul-16	675	-7.5%	-20.5%	seasonally adjusted
Residential - housing starts (units)	Aug-16	35,415	-10.4%	+29.3%	seasonally adjusted at annual rates
Non-Residential building permits (\$ M)	Jul-16	306	+1.9%	+0.7%	seasonally adjusted
Exports - all merchandise (\$ M)	Jun-16	3,078	-0.6%	-6.7%	seasonally adjusted
		Prices			
B.C. Consumer price index (2002=100)	July 2016	123.3	+0.2%	+2.1%	
Exchange rate	Aug 2016	US \$0.77	+0.4%	+1.2%	
Conventional mortgage - 5 year	Aug2016	4.74%	0 p.p.	+0.1 p.p.	
	Lab	our Market			
Employment	Aug-16	2,386,100	-0.3%	+3.1%	Seasonally Adjusted
Unemployment rate	Aug-16	5.5%	-0.1 p.p.	-0.7 p.p.	Seasonally Adjusted
Participation rate	Aug-16	64.1%	-0.3 p.p.	+0.6 p.p.	Seasonally Adjusted
Labour income (\$ millions)	Jun-16	10,640	+0.2%	+3.9%	Seasonally Adjusted
Average weekly earnings	Jun-16	924.64	+0.75%.	+1.65%	Seasonally Adjusted

Source: Statistics Canada & Bank of Canada

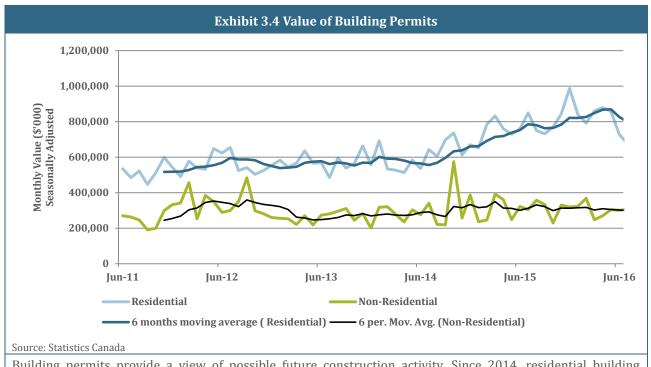
Note: p.p is percentage point, used here to show the difference between two percentage rates.



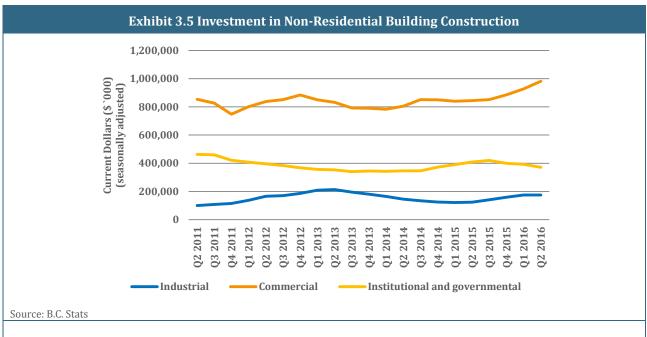


Source: Natural Gas (Henry Hub) from U.S. Energy Information Administration, others from Bank of Canada

Forestry prices remained unchanged in July 2016, pausing after consistent growth since Frebruary 2016. The Henry Hub Natural gas price jumped 8.9 percent, following the strong rebound in June. Metals and minerals prices climbed 2.0 percent, leaving the plateau of the past several month.



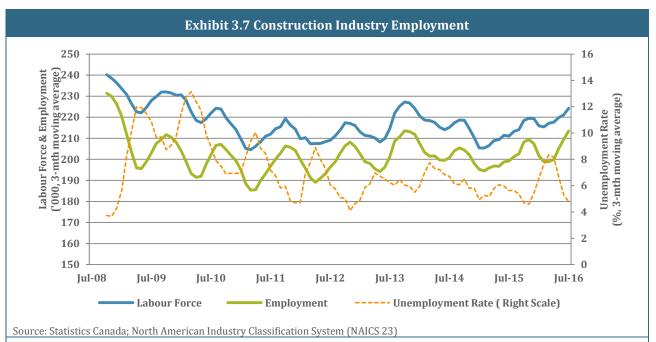
Building permits provide a view of possible future construction activity. Since 2014, residential building permits have increased by 26.0 percent.



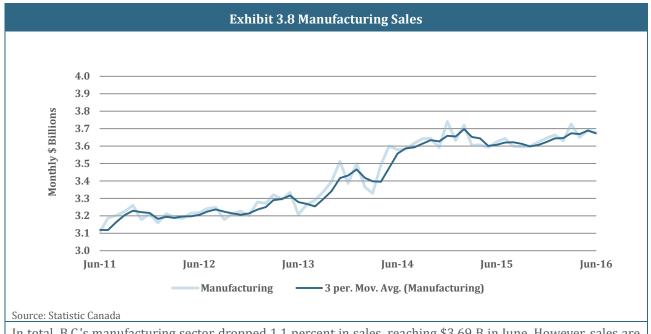
Total investment in non-residential buildings increased 2.2 percent in the second quarter of 2016, settling at \$1.52 B, 10.5 percent above year-ago levels.



Although trends for residential building permits started to soften, housing starts activity continues to be strong. The six month moving average reached a level of 42,553, a 37.3 percent increase on a year-ago basis.



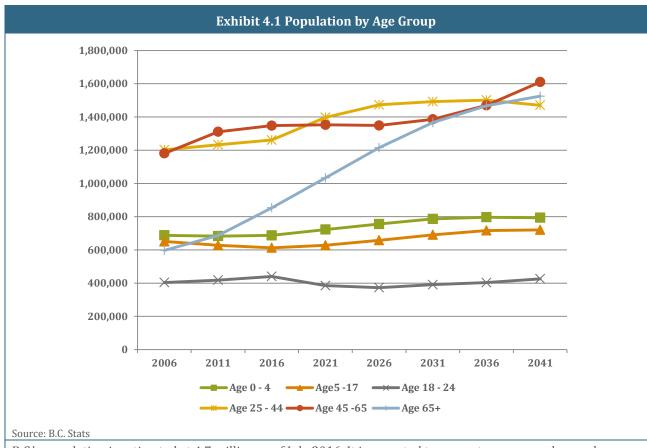
Continued strong housing starts increased the demand for labour in the construction sector. July employment levels increased by 1.9 percent to 213,500 and the labour force increased 1.4 percent to 224,200. As a result, the unemployment rate fell to 5.1 percent for the industry.



In total, B.C.'s manufacturing sector dropped 1.1 percent in sales, reaching \$3.69 B in June. However, sales are still 1.5% above one year-ago.

### **B.C. DEMOGRAPHICS**

# 4. B.C. Demographics

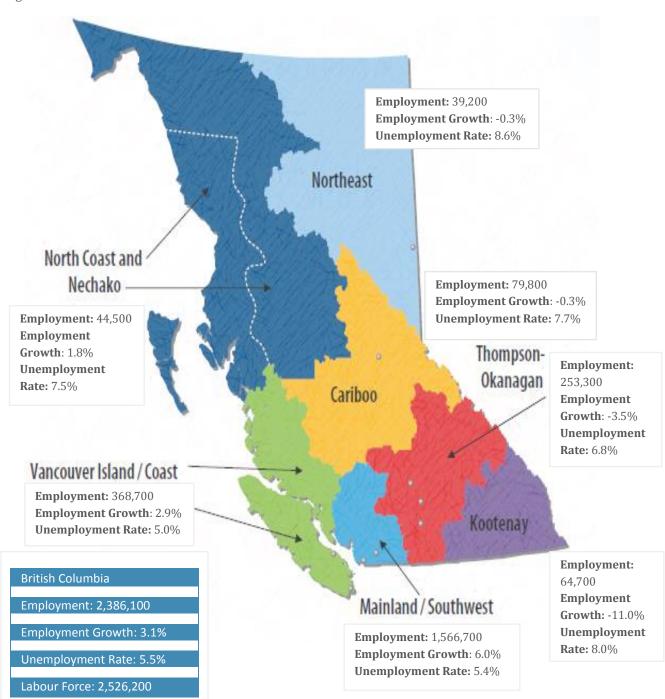


B.C.'s population is estimated at 4.7 million as of July 2016. It is expected to grow at a compound annual average rate of 1.0 percent between 2016 and 2021.

### **REGIONAL SUMMARIES**

### 5. Regional Summaries

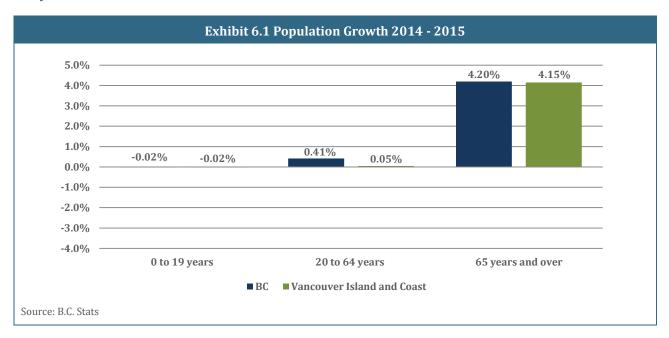
Regional Labour Market Statistics

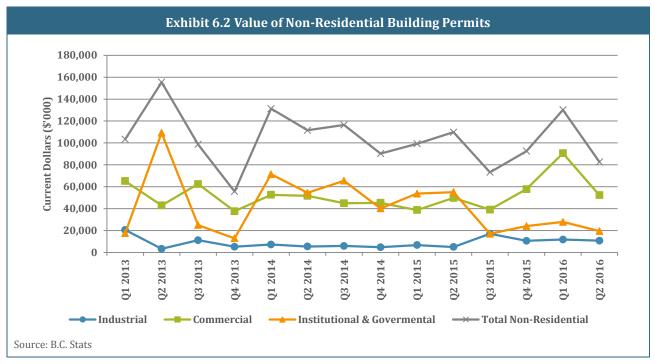


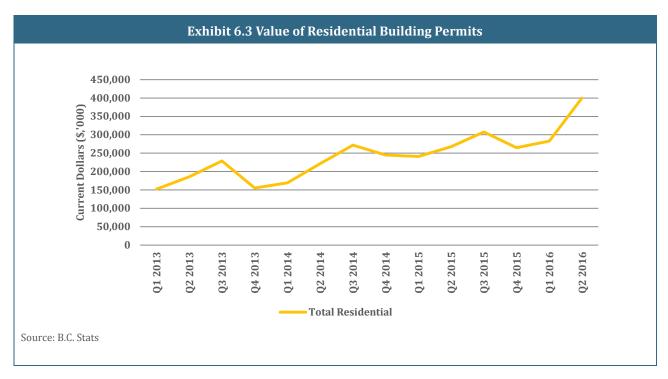
Note: Data for B.C. at the provincial level are seasonally adjusted. Data for the regions are not seasonally adjusted and are 3-month moving averages. This means that the data at the provincial level are not directly comparable to the regional data, but the data for each region are directly comparable with the other regions. Source: B.C. Stats

### 6. Vancouver Island/Coast Region

#### **Key Economic Indicators**

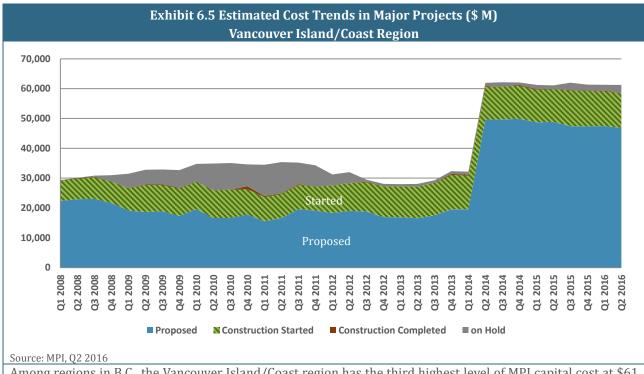








#### **Trends in Major Projects**



Among regions in B.C., the Vancouver Island/Coast region has the third highest level of MPI capital cost at \$61 B, ranked after the North Coast and Mainland/Southwest. There are four newly proposed projects added to the MPI in the second quarter of 2016. These are Belmont Market Shopping Centre at \$100 M, 989 Johnson street (\$30 M), Jukebox Lofts (\$25 M), and the Shire Condominiums (\$18 M). Two projects completed in this quarter such as the Buckley Bay Substation (\$32 M) and South Wellington Substation (\$29 M). Encore at Bayview Place (\$20 M) is the only new construction starting this quarter.

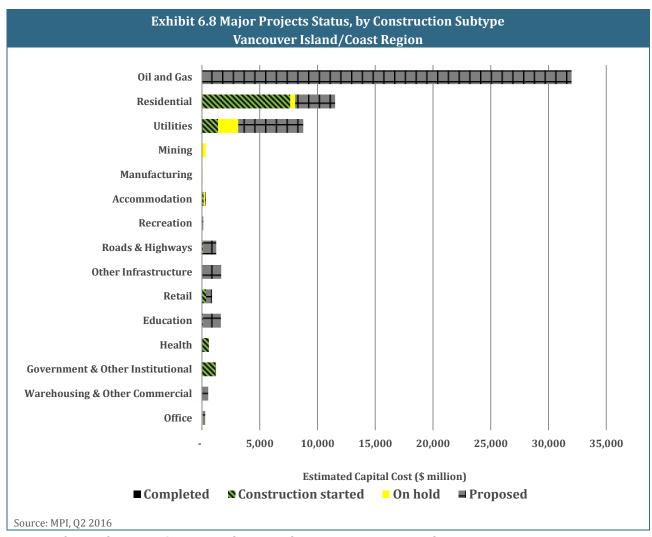
Exhibit 6.6 Estimated Cost Trends in Major Projects, by Project Status (\$M)  Vancouver Island/Coast Region										
	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change from the previous quarter	Change from the previous year			
Proposed	48,834	47,430	47,353	47,453	46,851	-1.3%	-4.1%			
Construction started	10,971	11,912	11,854	11,628	11,605	-0.2%	5.8%			
Completed	77	170	125	228	61	-73.2%	-20.8%			
On hold	1,206	2,481	2,016	1,981	2,731	37.9%	126.5%			
Total	61,088	61,993	61,348	61,290	61,248	-0.1%	0.3%			
urce: MPI, Q2 2016										

Exhibit 6.7 Summary of Major Projects (by Project Status)
Vancouver Island/Coast Region

	Estimated Capital Cost (\$M)	Percentage of Total	Number of Projects	Average Project Value (\$M)	Average Years in Inventory
Proposed	46,851	76%	69	768.0	5.5
Preliminary/Feasibility	32,967	70%	17	2,535.9	4.4
Consultation/Approvals	12,334	26%	38	352.4	6.5
Permitting	111	0%	5	22.2	0.8
Tender/Preconstruction	1,314	3%	6	219.0	5.9
Stage Unknown	125	0%	3	62.5	5.8
On Hold	2,731	4%	17	160.6	9.7
Construction Started	11,605	19%	52	227.5	7.5
Completed	61	0.1%	2	30.5	5.1
Total	61,248	100%	140	467.5	6.7

Source: MPI, Q2 2016

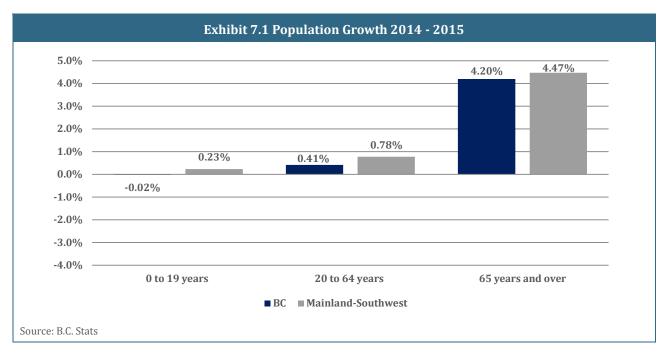
Notes: Average project value is the average of those projects for which there is a cost estimate. Average number of years in inventory is the average time span between the entry of the projects in the MPI and the updated date (June 30, 2016).

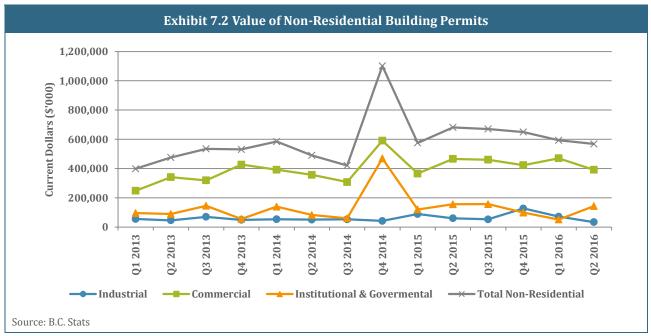


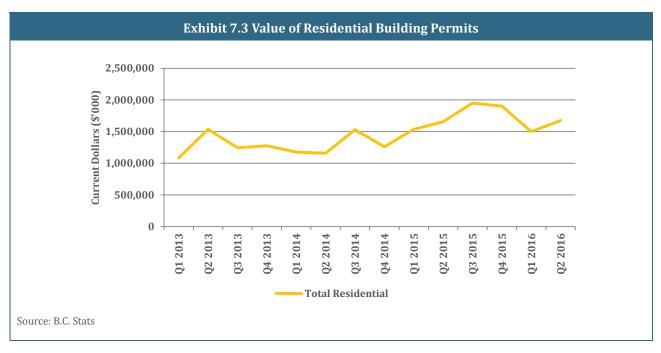
Proposed central coast LNG oprojects dominate the projects inventory in this region.

### 7. Mainland/Southwest Region

#### **Key Economic Indicators**

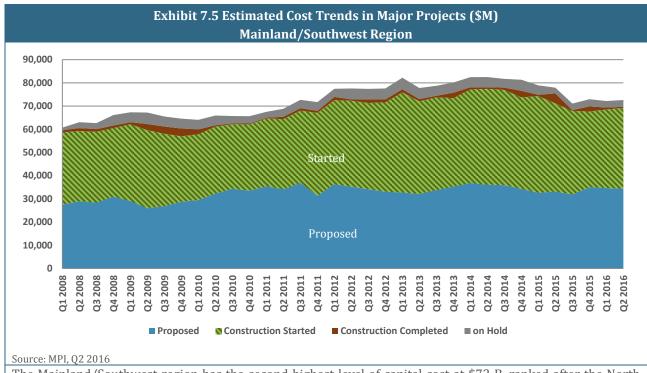








#### **Trends in Major Projects**



The Mainland/Southwest region has the second highest level of capital cost at \$72 B, ranked after the North Coast. There were 18 newly proposed projects added to the MPI in the second quarter of 2016, totalling a cost of \$523 M. A total worth of \$575 M projects started in this quarter. 18 projects are completed including Centennial Secondary School (\$49 M) and Culliton Creek Power Project (\$45 M).

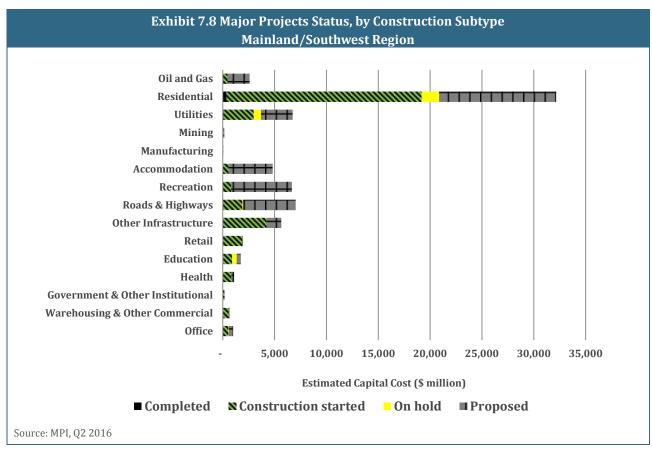
Exhibit 7.6 Estimated Cost Trends in Major Projects, by Project Status (\$ M)  Mainland/Southwest Region										
Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change from the previous quarter	Change from the previous year				
33,174	31,877	35,007	34,639	34,376	-0.8%	3.6%				
37,925	36,004	32,618	33,849	34,785	2.8%	-8.3%				
4,346	333	2,209	846	497	-41.3%	-88.6%				
2,453	2,842	3,095	2,823	2,931	3.8%	19.5%				
77,898	71,056	72,929	72,157	72,589	0.6%	-6.8%				
	Q2 2015  33,174  37,925  4,346  2,453	Mainland/S  Q2 2015  Q3 2015  33,174  31,877  37,925  36,004  4,346  333  2,453  2,842	Mainland/Southwest           Q2 2015         Q3 2015         Q4 2015           33,174         31,877         35,007           37,925         36,004         32,618           4,346         333         2,209           2,453         2,842         3,095	Mainland/Southwest Region           Q2 2015         Q3 2015         Q4 2015         Q1 2016           33,174         31,877         35,007         34,639           37,925         36,004         32,618         33,849           4,346         333         2,209         846           2,453         2,842         3,095         2,823	Mainland/Southwest Region           Q2 2015         Q3 2015         Q4 2015         Q1 2016         Q2 2016           33,174         31,877         35,007         34,639         34,376           37,925         36,004         32,618         33,849         34,785           4,346         333         2,209         846         497           2,453         2,842         3,095         2,823         2,931	Mainland/Southwest Region           Q2 2015         Q3 2015         Q4 2015         Q1 2016         Q2 2016         Change from the previous quarter           33,174         31,877         35,007         34,639         34,376         -0.8%           37,925         36,004         32,618         33,849         34,785         2.8%           4,346         333         2,209         846         497         -41.3%           2,453         2,842         3,095         2,823         2,931         3.8%				

Exhibit 7.7 Summary of Major Projects (by Project Status)
Mainland/Southwest Region

	Estimated Capital Cost (\$M)	Percentage of Total	Number of Projects	Average Project Value (\$M)	Average Years in Inventory
Proposed	34,376	47%	229	172.7	3.8
Preliminary/Feasibility	9,521	28%	45	288.5	4.2
Consultation/Approvals	19,724	57%	123	176.1	3.7
Permitting	1,520	4%	12	168.9	2.6
Tender/Preconstruction	1,682	5%	26	70.1	2.9
Stage Unknown	1,929	6%	23	91.9	5.3
On Hold	2,931	4%	21	146.6	8.2
Construction Started	34,785	48%	191	186.0	5.5
Completed	497	1%	18	27.6	3.6
Total	72,589	100%	459	171.2	4.7

Source: MPI, Q2 2016

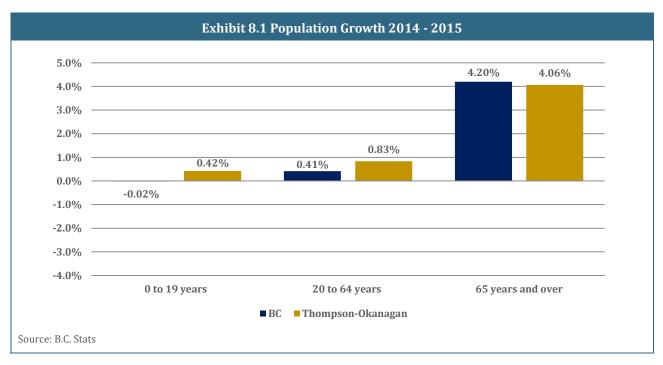
Notes: Average project value is the average of those projects for which there is a cost estimate. Average number of years in inventory is the average time span between the entry of the projects in the MPI and the updated date (June 30, 2016).

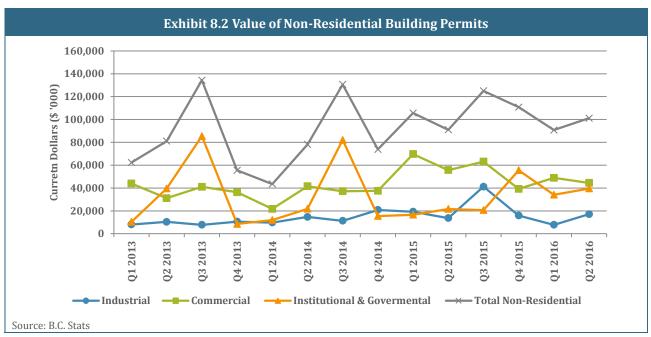


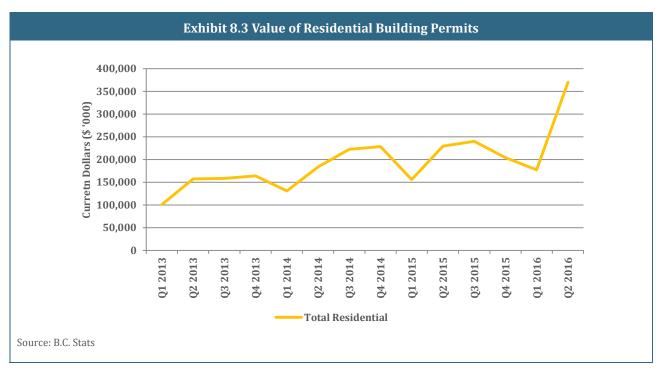
Residential projects dominate the MPI in this region.

# 8. Thompson - Okanagan Region

#### **Key Economic Indicators**

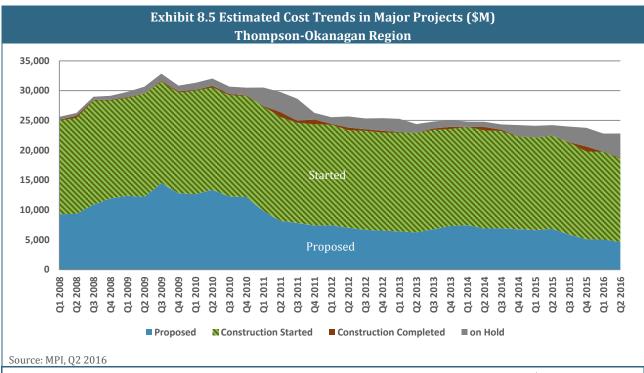








#### **Trends in Major Projects**



Among regions in B.C., Thompson-Okanagan ranked fifth in terms the level of capital cost at \$23 B. There were three construction projects started in this quarter, Penticton Hospital Redevelopment (\$312 M), Pennask Wind Power Project (\$45 M) and Shinish Creek Wind Power Project (\$45 M). One new proposed project added – 1151 Sunset Drive Condominium (\$20 M) and three projects completed in this quarter which are Mission Meadows at Casorso Condominium Development (\$63 M), Dilworth Mountain Estates (\$48 M), and Malakwa Bridge Replacement (\$33 M).

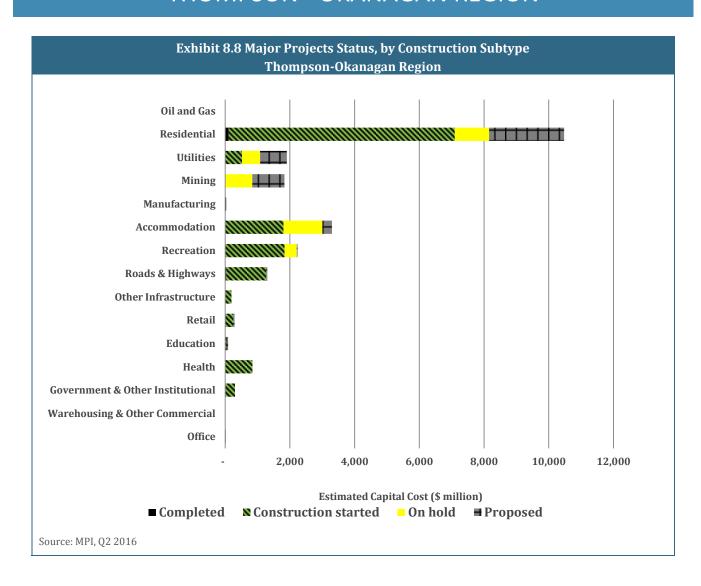
<b>15</b> 31	<b>Q3 2015</b> 5,857	<b>Q4 2015</b> 5,086	Q1 2016	Q2 2016	Change from the previous quarter	Change from the previous year
31	5.857	5.086	F 026	4.604		
	- ,	3,000	5,026	4,631	-7.9%	-32.2%
10	15,436	14,711	14,718	14,006	-4.8%	-10.3%
	57	839		144	-	-
79	2,618	3,133	3,062	4,032	31.7%	126.6%
20	23,968	23,769	22,806	22,813	0.0%	-5.8%
	779	779 2,618	779 2,618 3,133	779 2,618 3,133 3,062	779 2,618 3,133 3,062 <b>4,032</b>	779 2,618 3,133 3,062 <b>4,032</b> 31.7%

#### Exhibit 8.7 Summary of Major Projects (by Project Status) Thompson-Okanagan Region

	Estimated				
	Capital Cost (\$M)	Percentage of Total	Number of Projects	Average Project Value (\$M)	Average Years in Inventory
Proposed	4,631	20%	39	132.3	5.6
Preliminary/Feasibility	266	6%	9	44.3	4.2
Consultation/Approvals	3,890	84%	22	176.8	6.0
Permitting	160	3%	3	53.3	7.8
Tender/Preconstruction	150	3%	1	150.0	2.6
Stage Unknown	165	4%	4	55.0	5.8
On Hold	4,032	18%	13	310.2	10.9
Construction Started	14,006	61%	56	254.7	7.9
Completed	144	1%	3	48.0	6.9
Total	22,813	100%	111	215.2	7.4

Source: MPI, Q2 2016

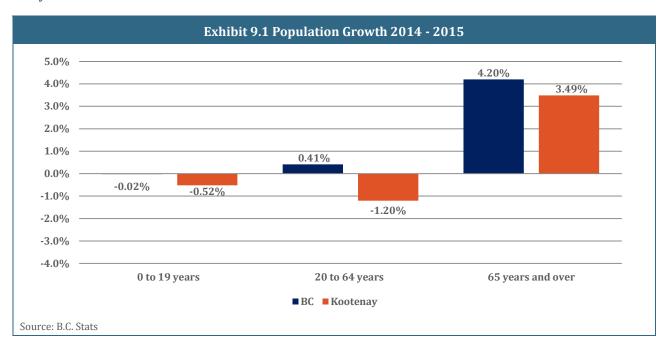
Notes: Average project value is the average of those projects for which there is a cost estimate. Average number of years in inventory is the average time span between the entry of the projects in the MPI and the updated date (June 30, 2016).

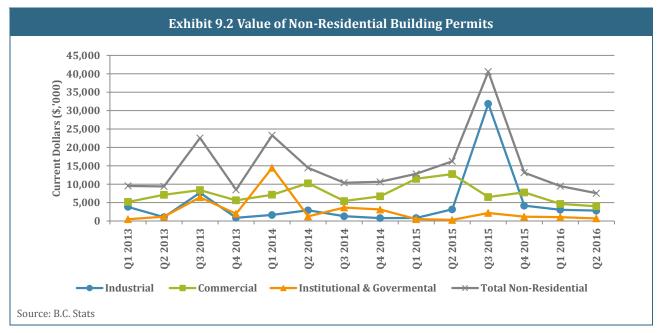


### **KOOTENAY REGION**

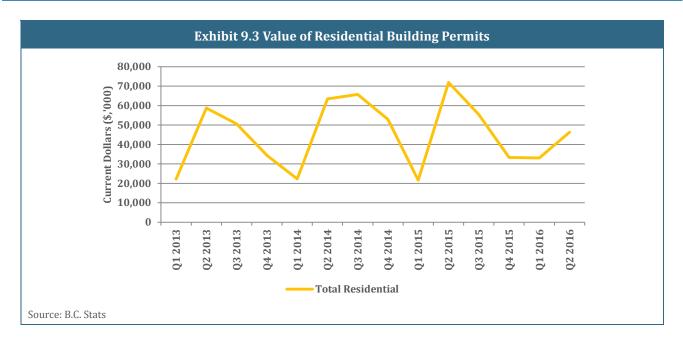
# 9. Kootenay Region

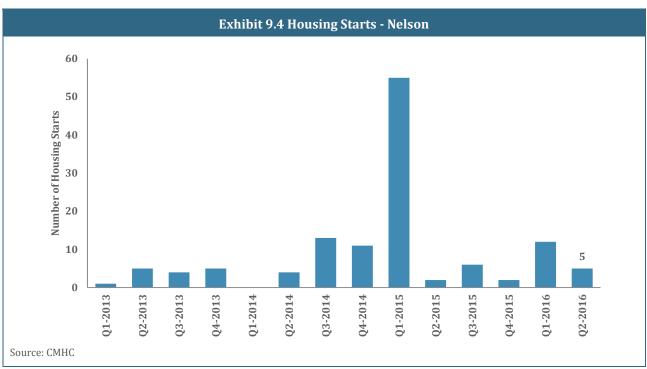
#### **Key Economic Indicators**





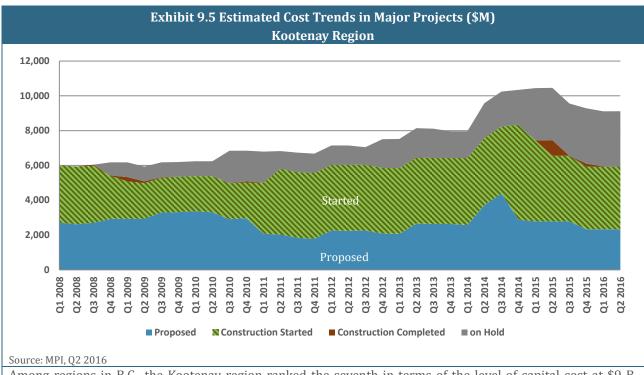
### **KOOTENAY REGION**





### **KOOTENAY REGION**

#### **Trends in Major Projects**



Among regions in B.C., the Kootenay region ranked the seventh in terms of the level of capital cost at \$9~B, above the ranking for Nechako. There were no new proposed projects added and no projects completed in the second quarter of 2016. The only project started in this quarter is Fernie Substation Upgrade and Feeder Addition (\$25~M).

Exhibit 9.6 Estimated Cost Trends in Major Projects, by Project Status (\$M) Kootenay Region										
	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change from the previous quarter	Change from the previous year			
Proposed	2,782	2,782	2,331	2,331	2,331	0.0%	-16.2%			
Construction started	3,771	3,771	3,598	3,578	3,603	0.7%	-4.5%			
Completed	900		173	20		-	-			
On hold	3,005	3,005	3,180	3,180	3,180	0.0%	5.8%			
Total	10,458	9,558	9,282	9,109	9,114	0.1%	-12.9%			
Source: MPI, Q2 2016										

### **KOOTENAY REGION**

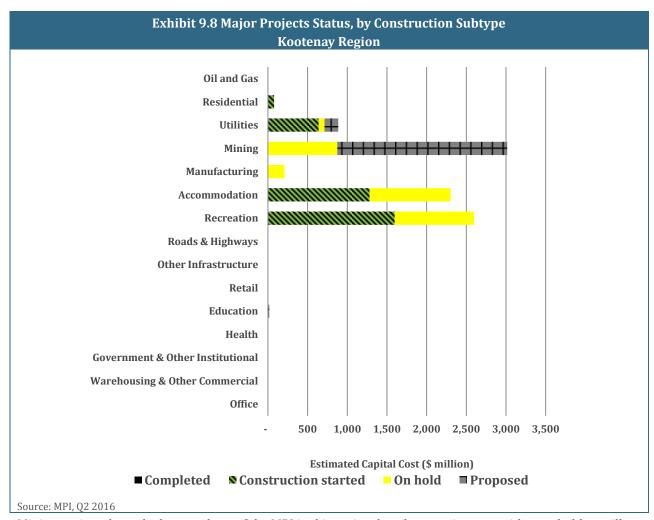
# Exhibit 9.7 Summary of Major Projects (by Project Status) Kootenay Region

	Estimated Capital Cost (\$M)	Percentage of Total	Number of Projects	Average Project Value (\$M)	Average Years in Inventory
Proposed	2,331	26%	6	466.2	5.0
Preliminary/Feasibility	-	-	1	-	2.3
Consultation/Approvals	1,961	84%	4	490.3	4.3
Permitting	-	-	-	-	-
Tender/Preconstruction	370	16%	1	370.0	10.6
Stage Unknown	-	-	-	-	-
On Hold	3,180	35%	8	397.5	9.9
Construction Started	3,603	40%	14	257.4	11.3
Completed	-	-	-	-	-
Total	9,114	100%	28	337.6	9.6

Source: MPI, Q2 2016

Notes: Average project value is the average of those projects for which there is a cost estimate. Average number of years in inventory is the average time span between the entry of the projects in the MPI and the updated date (June 30, 2016).

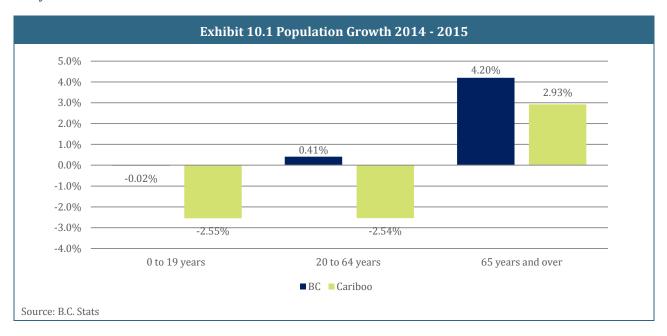
### **KOOTENAY REGION**

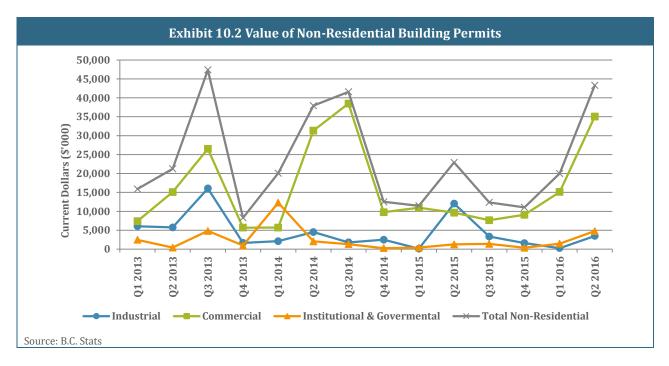


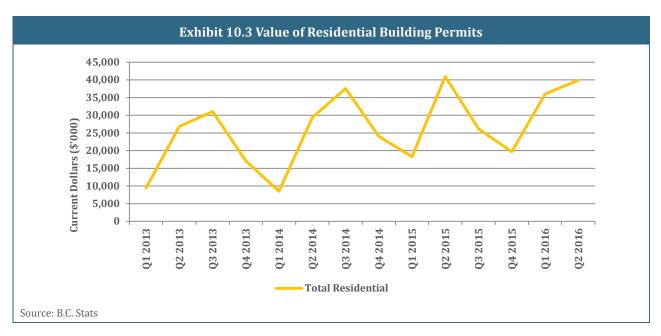
Mining projects have the largest share of the MPI in this region, but these projects are either on hold or still proposed. Other key categories are Accommodation and Recreation projects, a large proportion of which are under construction.

### 10. Cariboo Region

#### **Key Economic Indicators**

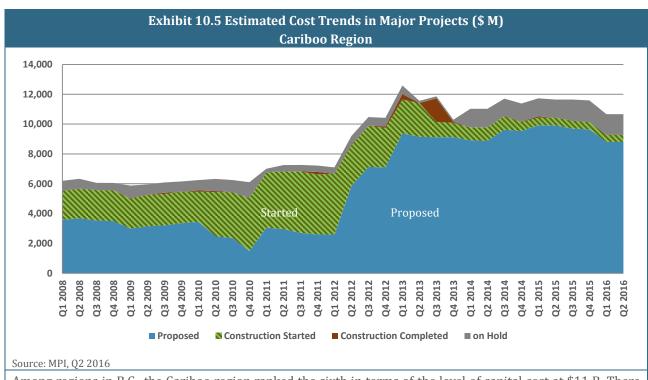








#### **Trends in Major Projects**



Among regions in B.C., the Cariboo region ranked the sixth in terms of the level of capital cost at \$11 B. There are no new proposed projects in the second quarter of 2016. Neither any change occurred in the status of the existing projects.

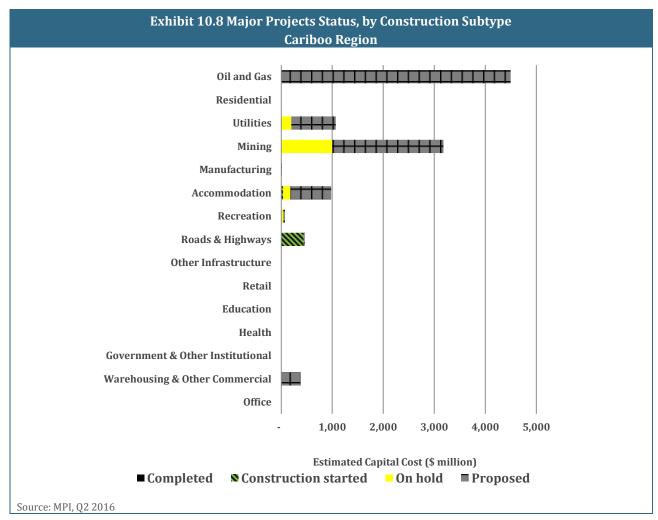
Cariboo Region										
Status	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change from the previous quarter	Change from the previous year			
Proposed	9,915	9,695	9,650	8,804	8,804	0.0%	-11.2%			
Construction started	520	520	480	480	480	0.0%	-7.7%			
Completed		20				-	-			
On hold	1,213	1,413	1,458	1,383	1,383	0.0%	14.0%			
Total	11,648	11,648	11,588	10,667	10,667	0.0%	-8.4%			

# Exhibit 10.7 Summary of Major Projects (by Project Status) Cariboo Region

	Estimated Capital Cost (\$M)	Percentage of Total	Number of Projects	Average Project Value (\$M)	Average Years in Inventory
Proposed	8,804	83%	19	489.1	6.1
Preliminary/Feasibility	1,646	19%	6	329.2	3.0
Consultation/Approvals	7,128	81%	11	648.0	8.0
Permitting	0	0%	0	0	0
Tender/Preconstruction	0	0%	0	0	0
Stage Unknown	30	0%	2	15.0	4.8
On Hold	1,383	13%	6	276.6	10.6
Construction Started	480	4%	2	240.0	7.3
Completed	0	0%	0	0.0	0.0
Total	10,667	100%	27	426.7	7.2

Source: MPI, Q2 2016

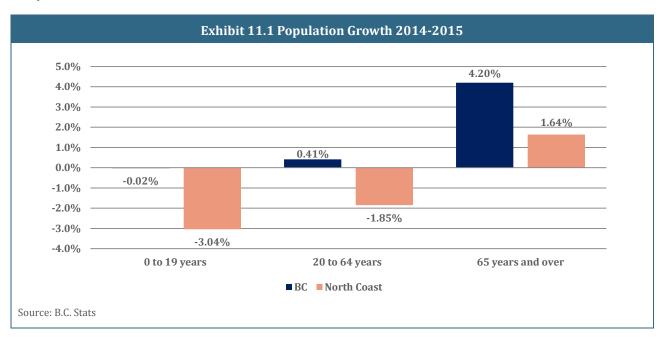
Notes: Average project value is the average of those projects for which there is a cost estimate. Average number of years in inventory is the average time span between the entry of the projects in the MPI and the updated date (June 30, 2016).

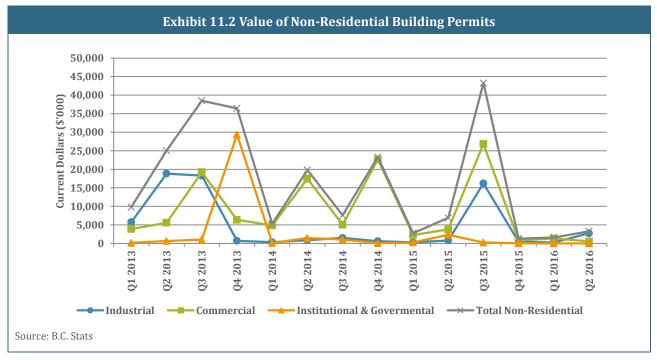


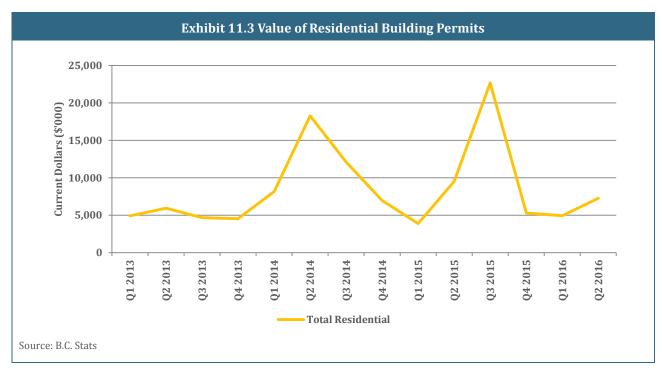
Oil and gas projects have the largest share of the Cariboo's MPI – all have the status of proposed. Significant proportions of projects are currently on hold in mining, utilities, and accommodation.

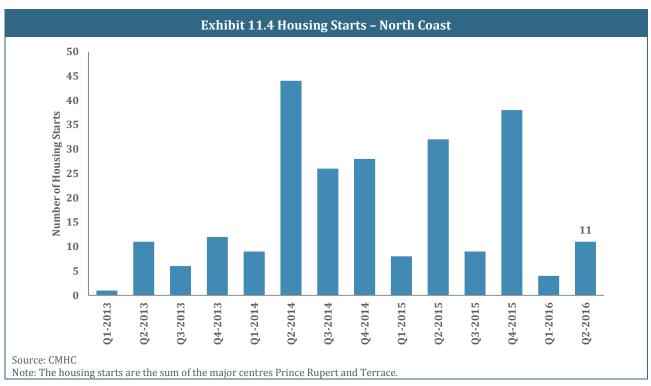
### 11. North Coast Region

#### **Key Economic Indicators**

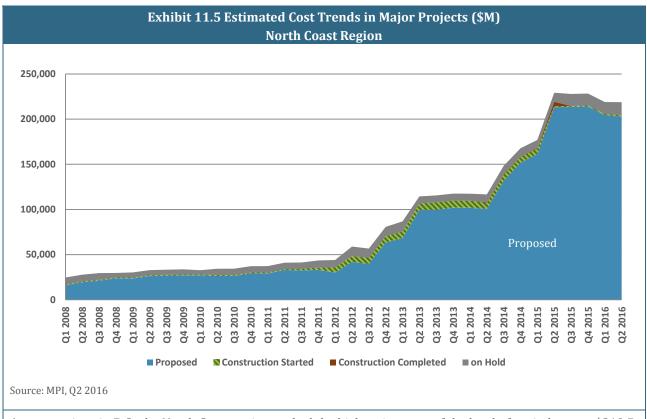








#### **Trends in Major Projects**



Among regions in B.C., the North Coast region ranked the highest in terms of the level of capital cost at \$219 B, mainly due to the estimated cost of proposed LNG projects. A new proposed project, Nisga'a LNG is added to the MPI in the second quarter of 2016. Silvertip Silver Mine (\$50 M) construction started and McLymont Creek Hydroelectric Project (\$ 217 M) completed in this quarter.

Exhibit 11.6 Estimated Cost Trends in Major Projects, by Project Status (\$M) North Coast Region										
Status	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change from the previous quarter	Change from the previous year			
Proposed	213,259	213,374	213,964	204,323	202,717	-0.8%	-4.9%			
Construction started	1,123	1,133	1,058	1,369	1,201	-12.3%	6.9%			
Completed	4890		75		217	-	-95.6%			
On hold	9,911	13,326	13,221	13,221	14,617	10.6%	47.5%			
Total	229,183	227,833	228,318	218,913	218,752	-0.1%	-4.6%			

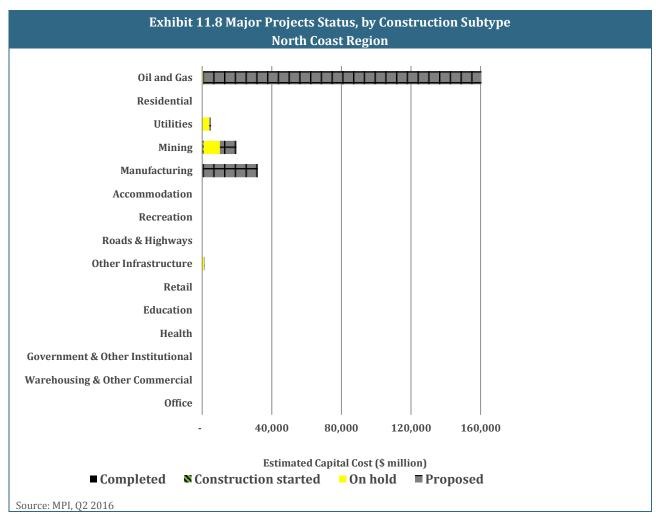
Exhibit 11.7 Summary of Major Projects (by Project Status)

North Coast Region

Estimated Capital Cost (\$M)         Percentage of Total         Number of Projects         Average Project Value (\$M)         Average Project Value (\$M)           Proposed         202,717         93%         43         5,791.9           Preliminary/Feasibility         34,170         17%         12         4,271.3           Consultation/Approvals         137,247         68%         28         5,718.6           Permitting         5,000         2%         1         5,000.0	
Preliminary/Feasibility         34,170         17%         12         4,271.3           Consultation/Approvals         137,247         68%         28         5,718.6	age Years in Inventory
Consultation/Approvals         137,247         68%         28         5,718.6	5.0
	3.3
Permitting         5,000         2%         1         5,000.0	5.6
	3.6
Tender/Preconstruction         1,300         1%         1         1,300.0	10.3
Stage Unknown         25,000         12%         1         25,000.0	4.6
On Hold 14,617 7% 15 1,044.1	9.2
Construction Started 1,201 1% 6 200.2	6.0
Completed 217 0.1% 1 217.0	10.8
Total 218,752 100% 65 3,906.3	6.2

Source: MPI, Q2 2016

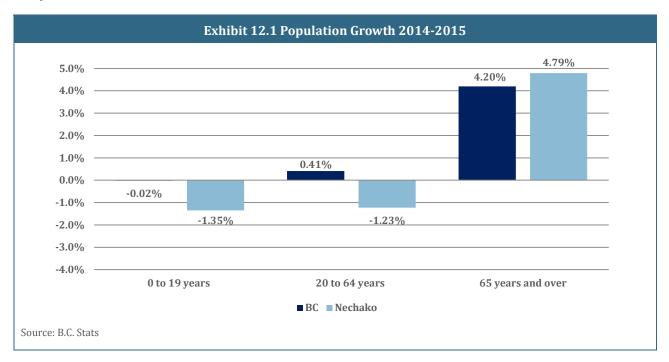
Notes: Average project value is the average of those projects for which there is a cost estimate. Average number of years in inventory is the average time span between the entry of the projects in the MPI and the updated date (June 30, 2016).

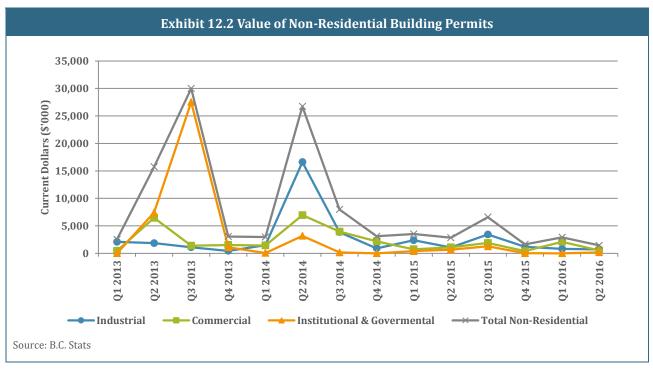


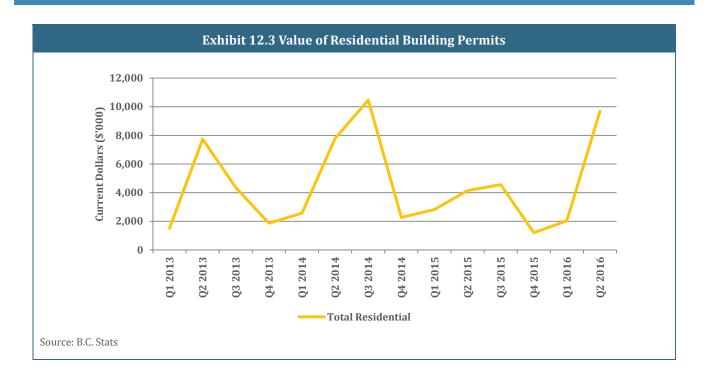
Proposed Oil and gas projects, primarily LNG related, continued to have the largest share of the North Coast's MPI.

### 12. Nechako Region

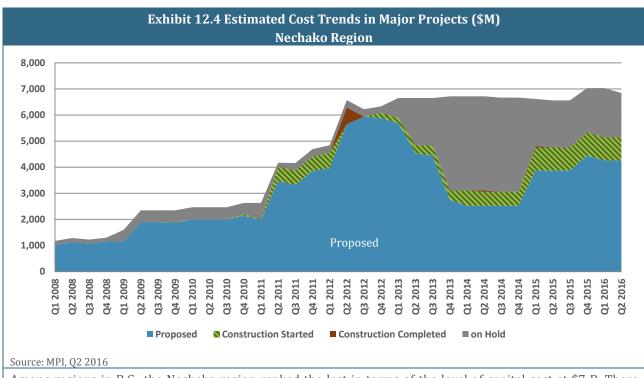
#### **Key Economic Indicators**







#### **Trends in Major Projects**



Among regions in B.C., the Nechako region ranked the last in terms of the level of capital cost at \$7 B. There were no MPI changes for the MPI in Nechako in the second quarter of 2016.

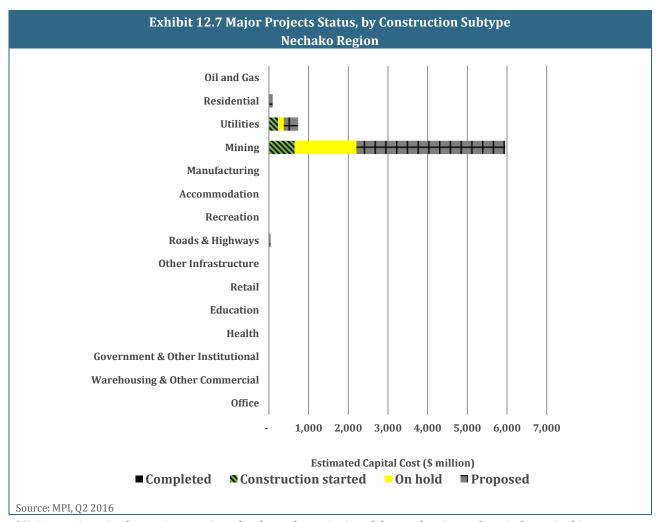
Exhibit 12.5 Estimated Cost Trends in Major Projects, by Project Status (\$M) Nechako Region										
	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change from the previous quarter	Change from the previous year			
Proposed	3,869	3,869	4,449	4,261	4,261	0.0%	10.1%			
Construction started	886	886	886	886	886	0.0%	0.0%			
Completed										
On hold	1,806	1,806	1,697	1,885	1,697	-10.0%	-6.0%			
Total	6,561	6,561	7,032	7,032	6,844	-2.7%	4.3%			
ırce: MPI, Q2 2016										

#### Exhibit 12.6 Summary of Major Projects (by Project Status) Nechako Region

Estimated Capital Cost (\$M)	Percentage of Total	Number of Projects	Average Project Value (\$M)	Average Years in Inventory
4,261	62%	10	473.4	8.1
2,175	51%	3	725.0	9.2
2,086	49%	6	347.7	8.0
-	-	-	-	-
-	-	-	-	-
-	0%	1	-	-
1,697	25%	3	565.7	8.3
886	13%	3	295.3	9.8
-	-	-	-	-
6,844	100%	16	456.3	8.5
	Capital Cost (\$M)  4,261  2,175  2,086  1,697  886	Capital Cost (\$M)         Percentage of Total           4,261         62%           2,175         51%           2,086         49%           -         -           -         0%           1,697         25%           886         13%           -         -	Capital Cost (\$M)         Percentage of Total         Number of Projects           4,261         62%         10           2,175         51%         3           2,086         49%         6           -         -         -           -         0%         1           1,697         25%         3           886         13%         3           -         -         -	Capital Cost (\$M)         Percentage of Total         Number of Projects         Average Project Value (\$M)           4,261         62%         10         473.4           2,175         51%         3         725.0           2,086         49%         6         347.7           -         -         -         -           -         0%         1         -           1,697         25%         3         565.7           886         13%         3         295.3           -         -         -         -

Source: MPI, Q2 2016

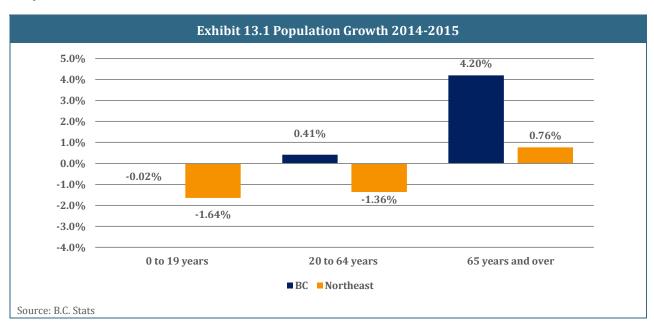
Notes: Average project value is the average of those projects for which there is a cost estimate. Average number of years in inventory is the average time span between the entry of the projects in the MPI and the updated date (June 30, 2016).

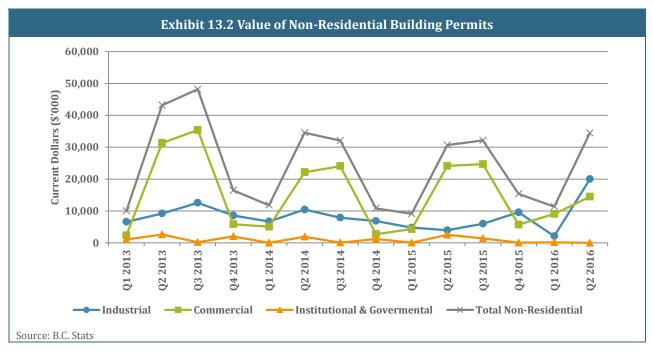


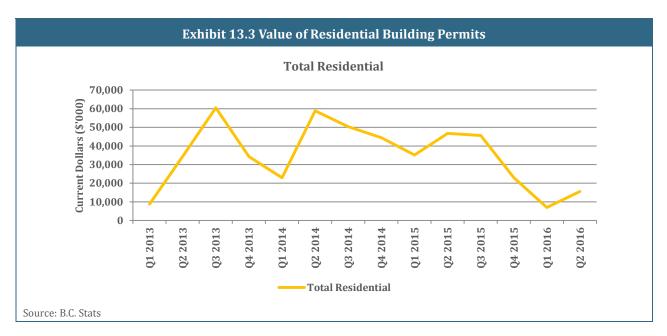
Mining projects in this region continued to have the majority of the total estimated capital cost in this quarter. A large proportion of projects are on hold and under the proposed status in the mining industry. Some mining construction activity are underway for the Atlin region project (\$450 M) and Houston project (\$201 M).

### 13. Northeast Region

#### **Key Economic Indicators**

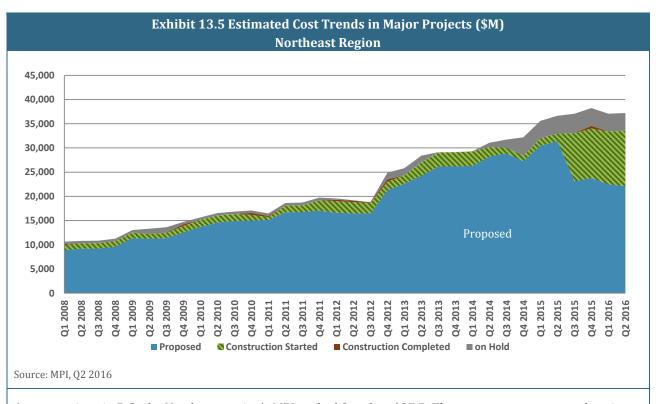








#### **Trends in Major Projects**



Among regions in B.C., the Northeast region's MPI ranked fourth at \$37 B. There are no new proposed projects in the second quarter of 2016. The W.A.C. Bennett Dam Riprap Upgrade Project (\$170M) construction started and Pellet Plant (\$29M) completed in this quarter.

Exhibit 13.6 Estimated Cost Trends in Major Projects, by Project Status (\$M) Northeast Region									
	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change from the previous quarter	Change from the previous year		
Proposed	31,446	23,151	23,796	22,482	22,132	-1.6%	-29.6%		
Construction started	1,529	9,908	10,217	10,932	11,398	4.3%	645.5%		
Completed		36	554		29	-	-		
On hold	3,667	3,977	3,667	3,667	3,667	0.0%	0.0%		
Total	36,642	37,072	38,234	37,081	37,226	0.4%	1.6%		
urce: MPI, Q2 2016									

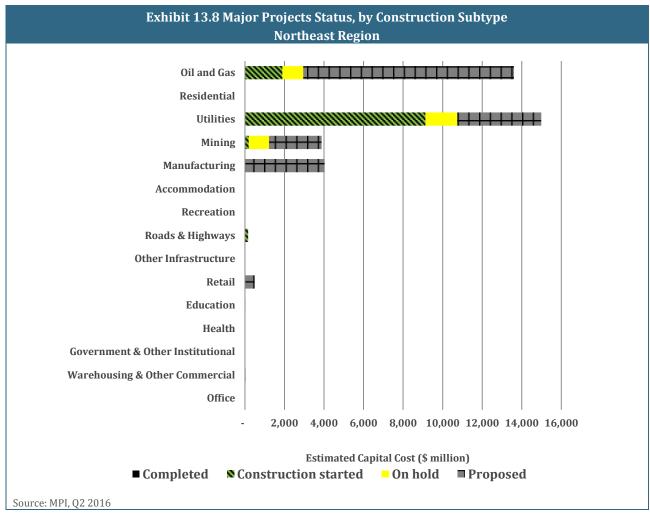
Exhibit 13.7 Summary of Major Projects (by Project Status)

Northeast Region

Estimated Capital Cost	Percentage of			
(\$M)	Total	Number of Projects	Average Project Value (\$M)	Average Years in Inventory
22,132	59%	36	790.4	4.4
172	1%	4	57.3	0.6
20,405	92%	28	927.5	5.1
1,500	7%	1	1500.0	1.3
40	0%	1	40.0	3.1
15	0%	2	15.0	3.5
3,667	10%	9	458.4	7.2
11,398	31%	17	712.4	2.6
29	0.1%	1	29.0	1.8
37,226	100%	63	702.4	4.3
	(\$M)  22,132  172  20,405  1,500  40  15  3,667  11,398  29	(\$M)  22,132 59%  172 1%  20,405 92%  1,500 7% 40 0% 15 0% 3,667 10%  11,398 31% 29 0.1%	(\$M)         Iotal         Projects           22,132         59%         36           172         1%         4           20,405         92%         28           1,500         7%         1           40         0%         1           15         0%         2           3,667         10%         9           11,398         31%         17           29         0.1%         1	(\$M)         Iotal         Projects         Value (\$M)           22,132         59%         36         790.4           172         1%         4         57.3           20,405         92%         28         927.5           1,500         7%         1         1500.0           40         0%         1         40.0           15         0%         2         15.0           3,667         10%         9         458.4           11,398         31%         17         712.4           29         0.1%         1         29.0

Source: MPI, Q2 2016

Notes: Average project value is the average of those projects for which there is a cost estimate. Average number of years in inventory is the average time span between the entry of the projects in the MPI and the updated date (June 30, 2016).



Utilities (Site C) and oil and gas projects in this region continued to have the largest shares in the total estimated capital cost in this quarter.

### **Appendices**

#### **Appendix 1**

#### New Proposed Projects (April - June 2016) **Estimated Cost** Region **Municipality Project** (\$ million) Langford Belmont Market Shopping Centre 100 Saanich The Shire Condominiums 18 1. Vancouver Island/Coast 25 Victoria Jukebox Lofts Victoria Condominium Development - 989 Johnson Street 30 Imperial Condominiums 22 Burnaby Burnaby **Burnaby Hospital Expansion** Chilliwack Fraser Valley Brewery Alex Fraser Bridge Interchange 30 Delta Fairwinds Townhomes 25 Ladner Langley Secondary School Replacement 26 Langley New Royal Columbian Hospital Redevelopment - Phase Westminster 2/3 North Vancouver 25 Promenade at the Quay Richmond Richmond Hospital Patient Care Tower Replacement 2. Mainland/Southwest Squamish University Heights Squamish Garibaldi Springs Residential Development 30 Surrey **Prescott Commons** 20 GCT Vanterm Densification Project 160 Vancouver InGastown Condominium Vancouver Vancouver The Smithe Condominiums 25 Vancouver Town Centre - River District Neighbourhood 40 Vancouver Playland Theme Park 120 Vancouver Mixed-Use Development 3. Thompson-Okanagan 1151 Sunset Drive Condominium 20 Kelowna 6. North Coast Nasoga Gulf Nisga'a LNG **Total** 716 Source: MPI, Q2 2016

#### Appendix 2

#### **Construction Started (April - June 2016) Estimated Municipality: Region: Project:** Cost (\$ million) 1. Vancouver Island/Coast Victoria Encore at Bayview Place 20 Burnaby Veritas Condominiums 20 Milano Condominiums Burnaby 30 Burnaby Cameron Townhouse Development 22 Burnaby Midori Condominiums 30 Burnaby Madison and Dawson Condominium 20 Sechelt Narrows Inlet Hydro Project 210 2. Mainland/Southwest Surrey Courthouse Expansion Surrey 27 Surrey Area South Surrey Area Reinforcement Project 34 Vancouver The Jervis Condominium 20 The Creek Condominiums - 95 East 1st Ave Vancouver 100 Vancouver Sir Sanford Fleming Elementary Seismic Upgrades 22 Monarch at QE Park Vancouver 20 **Beverley Condominiums** White Rock 20 Kelowna Pennask Wind Power Project 45 3. Thompson-Okanagan Penticton Hospital Redevelopment Penticton 312 Summerland Shinish Creek Wind Power Project 45 4. Kootenay Fernie Fernie Substation Upgrade and Feeder Addition 25 6. North Coast Cassiar Silvertip Silver Mine 50 8. Northeast Hudson Hope W.A.C. Bennett Dam Riprap Upgrade Project 170 **Total** 1,242 Source: MPI, Q2 2016

#### Appendix 3

Region	Municipality	Project	Estimated Cost (\$ million)
	Courtenay Area	Buckley Bay Substation (formerly Courtenay Area Substation)	32
1. Vancouver Island/Coast	Nanaimo	South Wellington Substation (formerly Wellington Substation, and Nanaimo Area Substation)	29
	Abbotsford	Westerleigh Rowhomes	4(
	Coquitlam	Centennial Secondary School	49
	Delta	Boundary Bay Industrial Park	20
	Langley	Arcadia Townhouses	20
	Langley	Exchange Townhomes	20
	Langley	Keaton Townhouses	2
	Langley	York by Mosaic	4
	Lillooet	Upper Lillooet River	2
2. Waterland /Carehana	North Vancouver	Condominium Development	2
2. Mainland/Southwest	Richmond	Alexandra Court Condominiums	2
	Richmond	Mandarin Residences	4
	Squamish	Culliton Creek Power Project	4
	Surrey	Adagio Condominiums	2
	Vancouver	Sequel 138 Condominium Development	2
	Vancouver	Canvas Condominium Development	4
	Vancouver	Proximity Condominium	2
	Vancouver	Aperture Condominiums	2
	Whistler	Rainbow Plaza and Condominiums	2
	Kelowna	Mission Meadows at Casorso Condominium Development	6
3. Thompson-Okanagan	Kelowna	Dilworth Mountain Estates	4
	Malakawa	Malakwa Bridge Replacement	3
6. North Coast	Stewart	Mclymont Creek Hydroelectric Project	21
3. Northeast	Fort St. John	Pellet Plant	2
Гotal			94

#### **Appendix 4**

#### **Project Value and Project Status for each Industry Sector - (April - June 2016)**

	Proposed	Construction started	Completed	On hold	Total
Oil and Gas	209,125	2,368	0	1,650	213,143
Residential	17,187	33,538	473	3,158	54,356
Utilities	16,223	14,800	344	8,884	40,251
Mining	21,289	1,812	0	14,938	38,039
Manufacturing	36,075	50	29	300	36,454
Accommodation	5,412	3,869	0	2,466	11,747
Recreation	5,986	4,243	0	1,468	11,697
Roads & Highways	6,322	3,858	33	69	10,282
Other Infrastructure	3,300	4,746	0	790	8,836
Retail	1,108	2,512	0	0	3,620
Education	2,037	1,004	49	435	3,525
Health	259	2,337	0	0	2,596
Government & Other Institutional	81	1,647	0	0	1,728
Warehousing & Other Commercial	1,067	575	20	0	1,662
Office	632	605	0	80	1,317
	326,103	77,964	948	34,238	439,253

Source: MPI, Q2 2016

#### **Appendix 5**

#### Number of Regional Major Projects Excluding Completed Projects (by Project Category)

Development Region	Residential/ Commercial	Transportation& Warehousing	Mining, Oil & Gas Extraction	Utilities	Manufacturing	Public Services	Other Services	Total
Vancouver Island/Coast	85	12	6	19	1	9	6	138
Mainland/So uthwest	303	37	6	41	2	42	10	441
Thompson- Okanagan	55	11	4	20	1	10	7	108
Kootenay	10		5	6	1	1	5	28
Cariboo	6	3	8	7	1		2	27
North Coast	2	15	31	10	5	1		64
Nechako	1	1	9	5				16
Northeast	2	13	24	20	2	1		62
Total	464	92	93	128	13	64	30	884

Source: MPI, Q2 2016

### **B.C. GOVERNMENT CONTACT**

#### **B.C.** Government Contact

Grace Lee, Ministry of Jobs, Tourism, and Skills Training

Tel: (250) 387-7476

Email: <a href="mailto:Grace.Lee@gov.bc.ca">Grace.Lee@gov.bc.ca</a>

www.majorprojectsinventory.com

