



Construction & Maintenance Looking Forward

National Highlights

Preliminary Construction and Maintenance Looking Forward

Construction and Maintenance Looking Forward is an industry planning tool.


MCAC
October 3rd, 2019

An Assessment of
Construction Labour
Markets from
2020–2029



1

BuildForce Canada and the scenario forecast



About BuildForce Canada	Strategic partners	About the scenario forecast
<ul style="list-style-type: none"> Originally created in 2001 as the Construction Sector Council. BuildForce Canada is a national industry-led organization committed to working with the construction industry to provide information and resources to assist with its management of workforce requirements. The annual LMI forecast is funded by the Government of Canada through the ESDC's Sectoral Initiatives Program. 	<p>Alberta Council of Turnaround Industry Maintenance Stakeholders</p> <p>BC Hydro</p> <p>CNOOC International</p> <p>Canadian Natural Resources Limited</p> <p>Irving Oil</p> <p>LNG Canada</p> <p>Manitoba Hydro</p> <p>Ontario Power Generation</p> <p>Suncor</p> <p>Syncrude Canada</p> <p>Canadian Construction Association</p> <p>Canadian Home Builders' Association</p> <p>Merit Canada</p> <p>National Construction Labour Relations Alliance</p> <p>Progressive Contractors Association of Canada</p> <p>Canada's Building Trades Unions</p> <p>CLAC</p>	<ul style="list-style-type: none"> The BuildForce scenario forecast is based on: <ul style="list-style-type: none"> macroeconomic and demographic data construction and maintenance investment in residential and non-residential sectors inventory of major construction projects input of provincial labour market information (LMI) committees The BuildForce labour market model covers 34 "on-site" trades and occupations and an "other" category that includes all remaining occupations (mostly office/administrative staff). Construction industry totals align with Statistics Canada's Labour Force Survey.

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Investment and employment trends

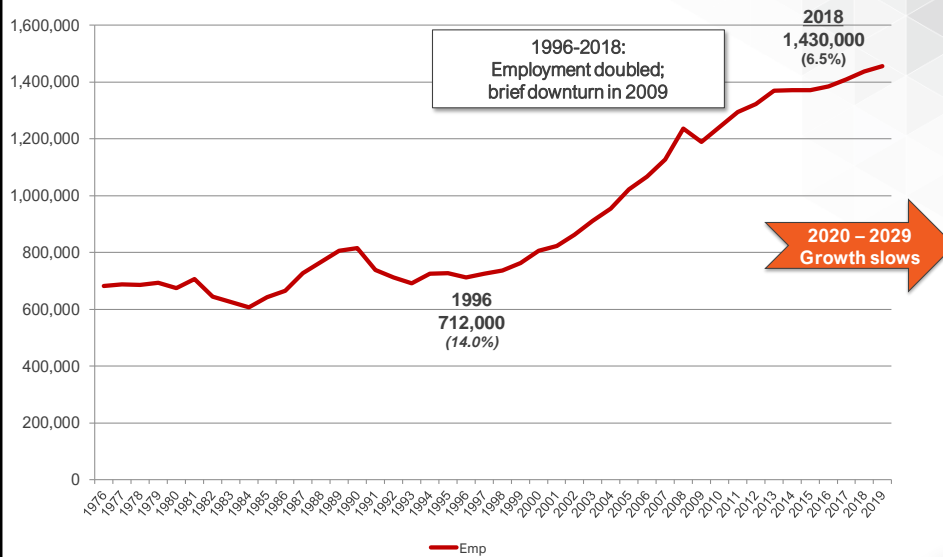
- Investment trends drive construction employment.
- Key markets/sectors include:
 - **Residential**
 - New housing (*single, semi-detached, row, highrise*)
 - Housing renovation
 - Maintenance (*property upkeep and maintaining living conditions*)
 - **Non-residential**
 - Industrial
 - Commercial
 - Institutional
 - Engineering
 - Industrial and utilities (*mining, oil and gas, and utilities*)
 - Roads, highways and bridges
 - Other (*pipelines, water and sewer lines, transit systems, tunnels, and other civil engineering*)
 - Maintenance (*across all sectors*)

ICI Building

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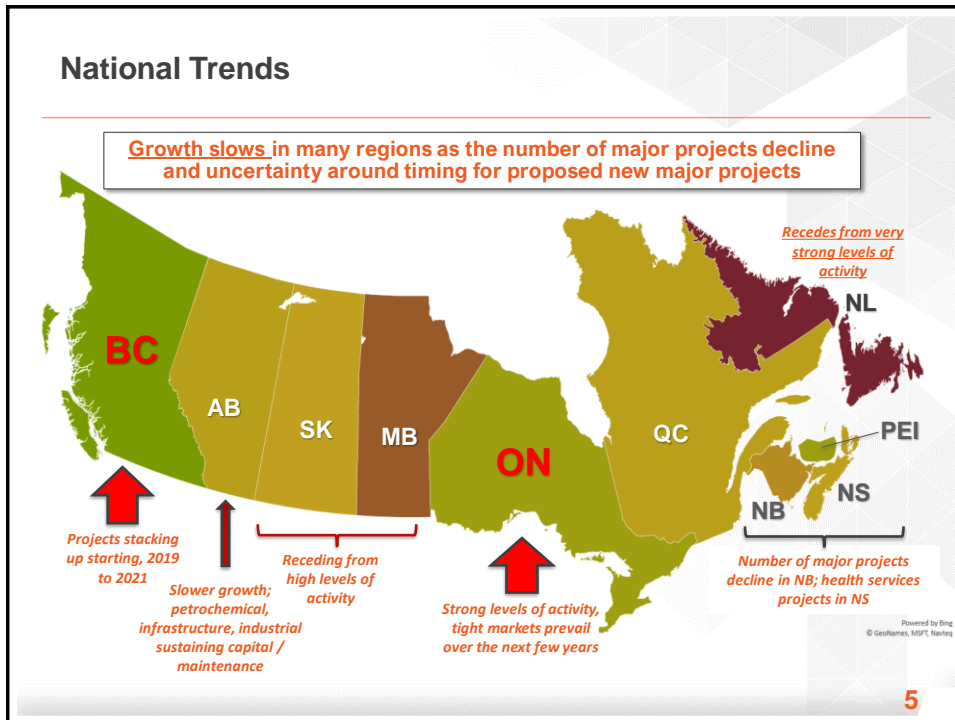
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Construction Labour Market Trends Total Employment (Res + Non-res), Canada

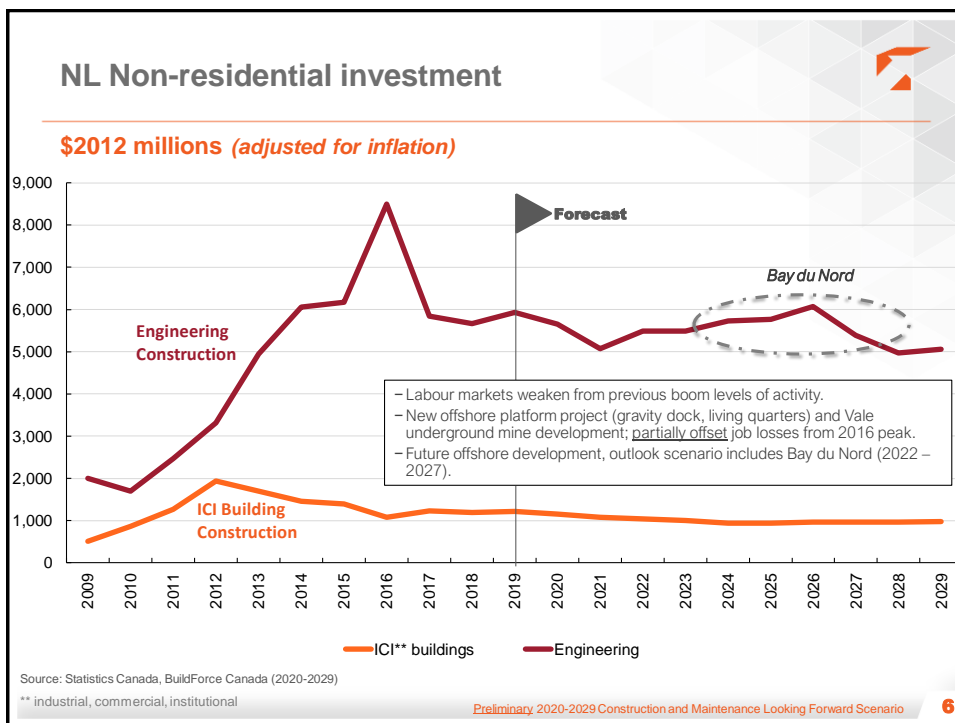


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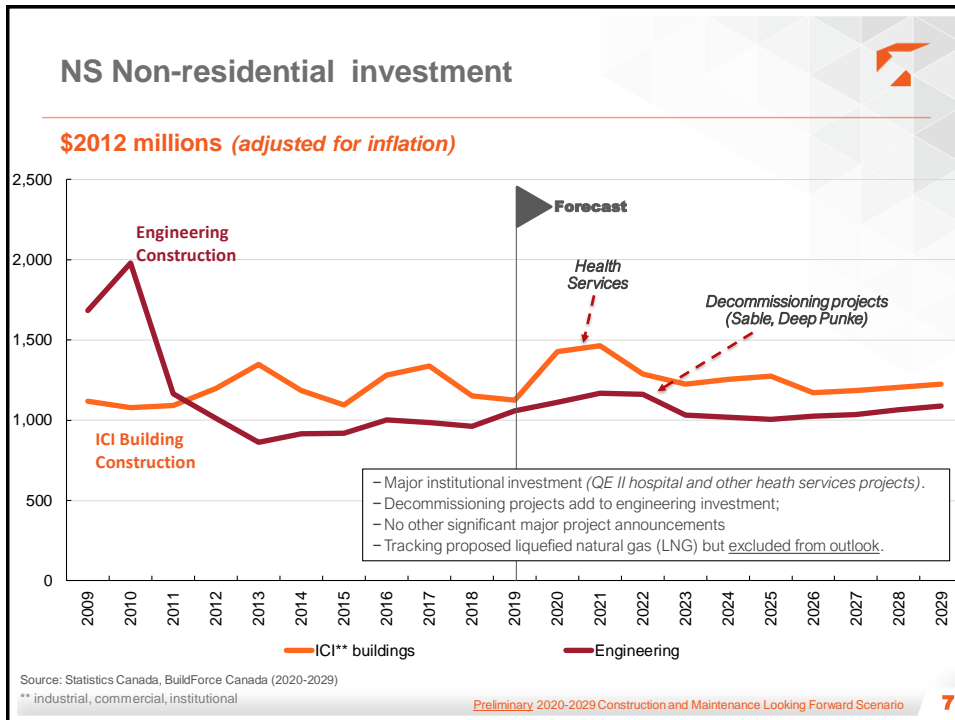
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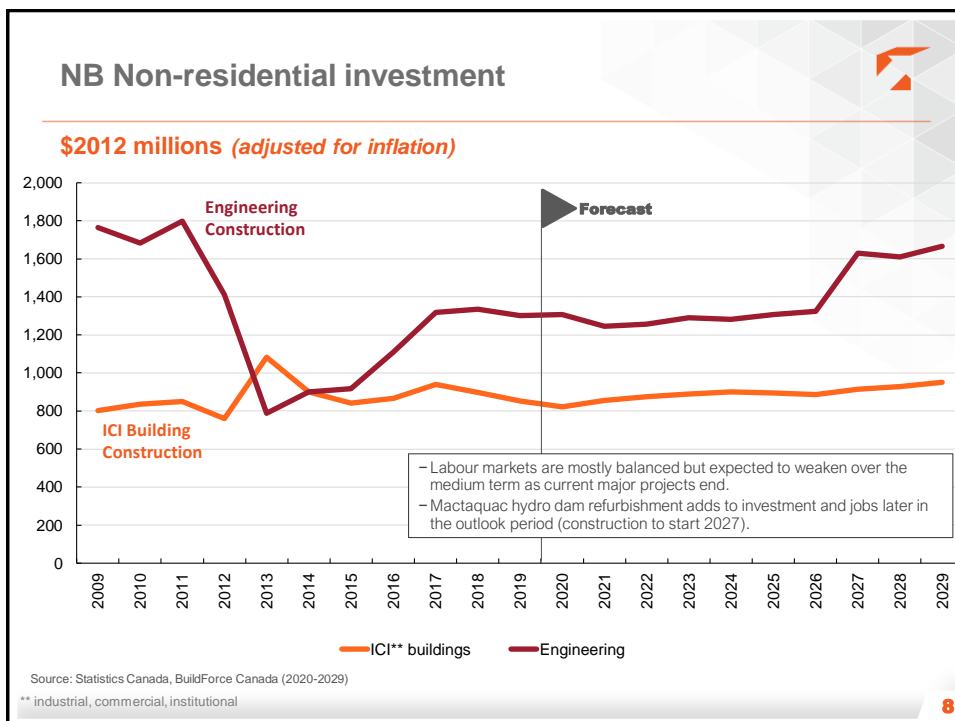
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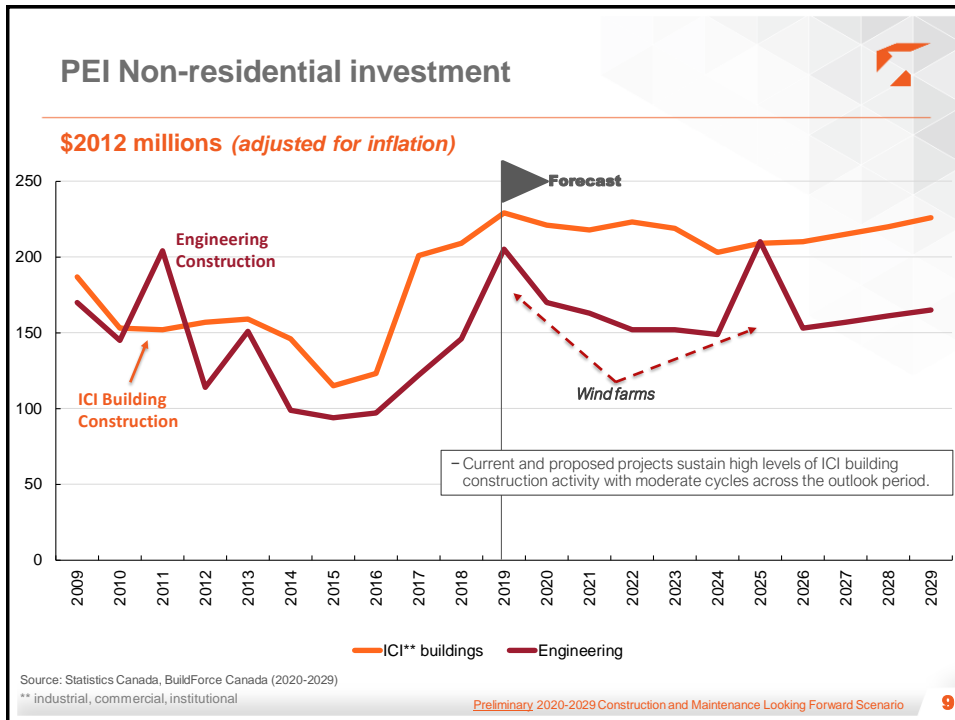
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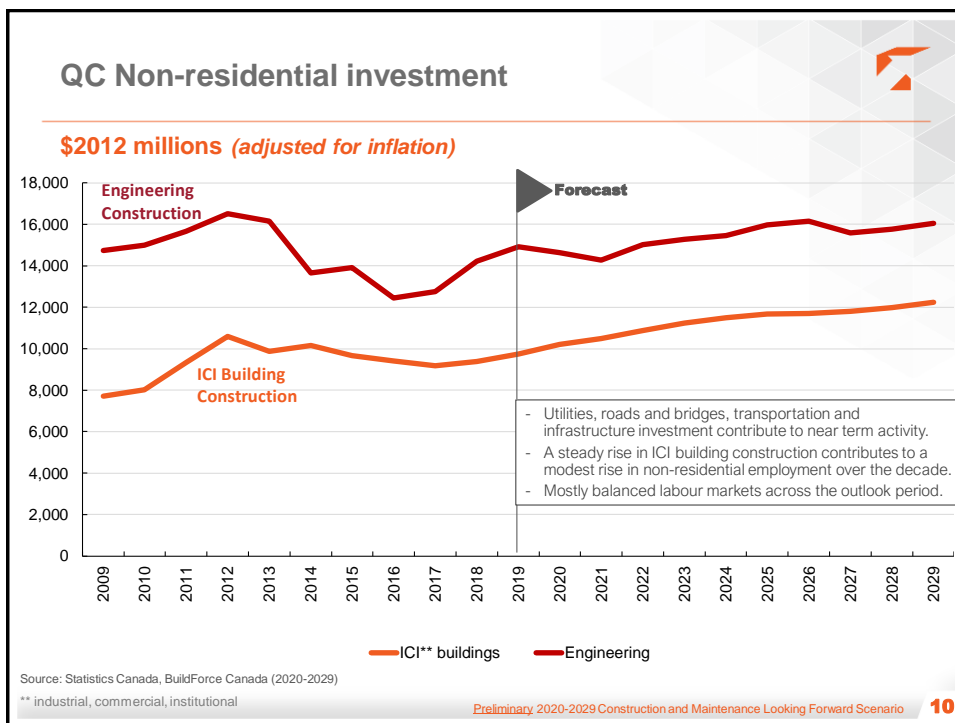
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ON – Select current and proposed major projects

Company: Project Name	Region	Anticipated Construction Dates	Estimated Value (\$Millions)
-- Transportation			
Ontario Line - Transit Expansion	GTA	2022-2027	11,000
Eglinton Crosstown LRT	GTA	2016-2021:3	9,100
Go Expansion: OnCorr: GO RER electrification project	GTA	2021-2028	6,800
Yonge Subway Extension (YSE) North	GTA	2023-2030	5,000
Scarborough Subway Extension	GTA	2023-2029	5,000
Eglinton Crosstown LRT - West Extension to airport	GTA	2022-2029	4,000
Finch LRT West	GTA	2020:2-2023:4	2,500
Ottawa Confederation Line Extension Project	East	2019:1-2026:4	3,500
Hurontario LRT	GTA	2020:2-2022:4	2,000
Toronto Union Go Transit Electrification Expansion	GTA	2022-2026	2,000
Barrie Go Rail Corridor Expansion	Central	2020-2024	1,848
Sheppard East LRT Expansion	GTA	2025-2029	1,000
Hamilton LRT	Central	2021:-2025:4	1,000
-- Utilities			
OPG - Darlington Nuclear Refurbishment	GTA	2016-2025	13,500
Bruce Nuclear Refurbishment	SW	2020-2033	13,000
-- Manufacturing			
Nova Chemicals - SCLAIRTECH technology facility (AST2) and Corunna Phase 3	SW	2018:2-2021:3	2,000
Maple Leaf Foods: Poultry Processing Plant	SW	2019:1-2020:4	660
-- Health services			
Ottawa Civic Hospital	East	2023-2027	2,500
Mississauga Health Trillium	GTA	2023-2026	2,000
Windsor Acute Care Hospital Facility	SW	2026-2030	1,500
Mackenzie Vaughn Hospital	GTA	2016:4-2020:4	1,300
West Park Healthcare Centre	GTA	2019:3-2023:4	1,200
CAMH Queen Street Redevelopment - Phase D	GTA	2023-2025	1,000
Queensway Health Centre	GTA	2022-2025	1,000
-- Roads, highways and bridges			
Gordie Howe Bridge - Detroit River International Crossing	Southwest	2018:4-2022:4	2,500
Gardiner Rehab	GTA	2018-2024	2,200
407 Extension - Phase 2	GTA	2016-2020:1	1,200
Highway 427 Expansion	GTA	2017-2021	616

~ \$55 Billion

~ \$26.5 Billion

~ \$2.6 Billion

~ \$10.5 Billion

~ \$6.5 Billion

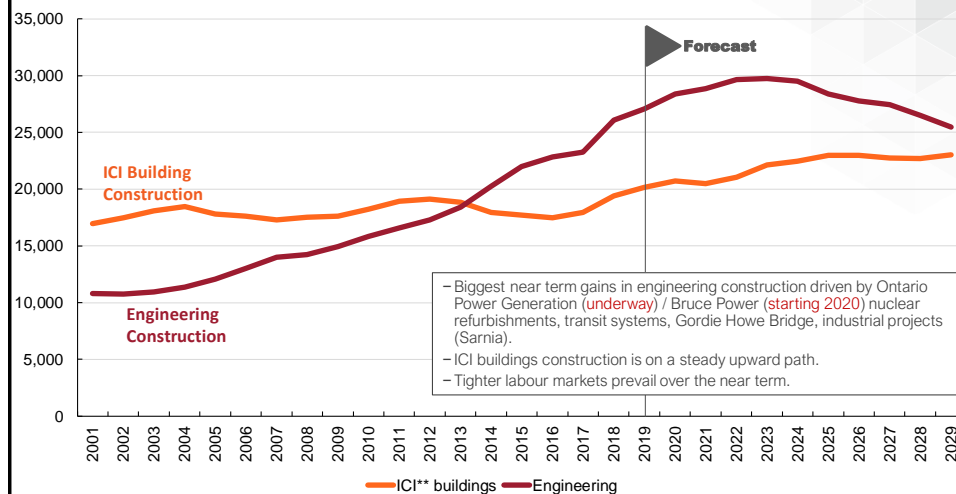
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ON Non-residential investment

\$2012 millions (adjusted for inflation)



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ON Non-residential market conditions

2018 Unemployment Rate – 4.4%
2019 – 2022: Tighter labour markets prevail across several regions.

WEAK



TIGHT

1

Workers meeting employer qualifications are available in local markets to meet an increase in demand at the current offered rate of compensation and other current working conditions. Excess supply is apparent and there is a risk of losing workers to other markets.

2

Workers meeting employer qualifications are available in local markets to meet an increase in demand at the current offered rate of compensation and other working conditions.

3

The availability of workers meeting employer qualifications in the local market may be limited by large projects, plant shutdowns or other short-term increases in demand. Employers may need to compete to attract needed workers. Established patterns of recruiting and mobility are sufficient to meet job requirements.

4

Workers meeting qualifications are generally not available in local markets to meet any increase. Employers will need to compete to attract additional workers. Recruiting and mobility may extend beyond traditional sources and practices.

5

Needed workers meeting employer qualifications are not available in local markets to meet current demand so that projects or production may be delayed or deferred. There is excess demand, competition is intense and recruiting reaches to remote markets.

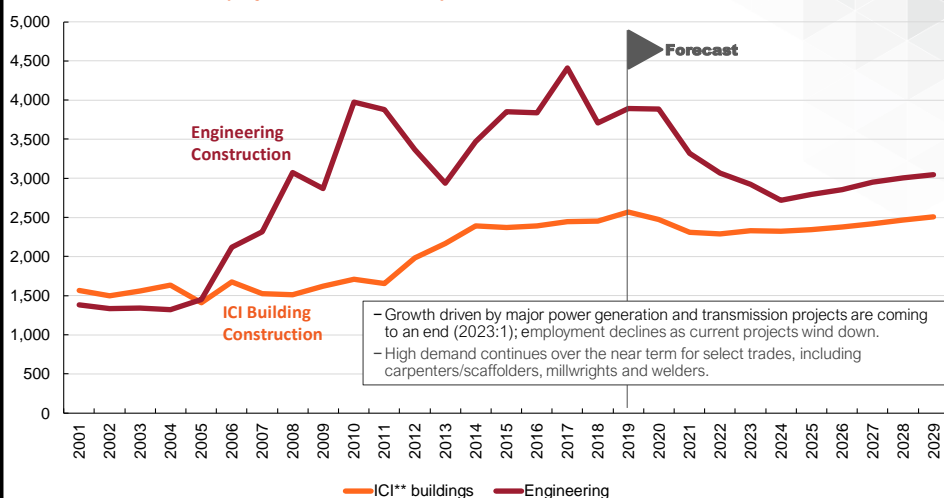
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MB Non-residential investment

\$2012 millions (adjusted for inflation)



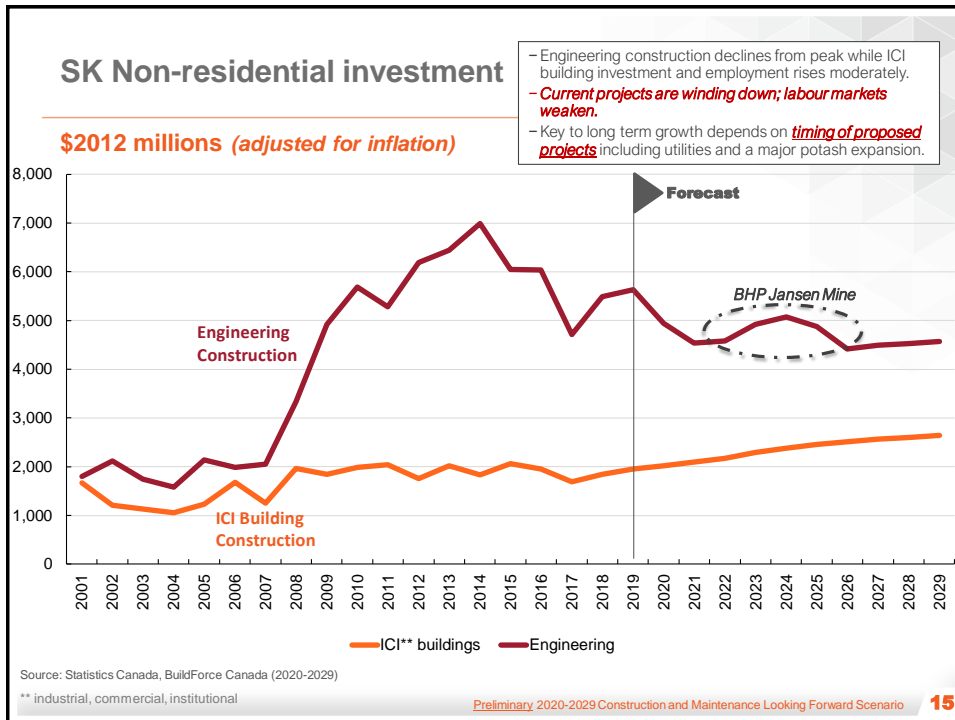
Source: Statistics Canada, BuildForce Canada (2020-2029)

** industrial, commercial, institutional

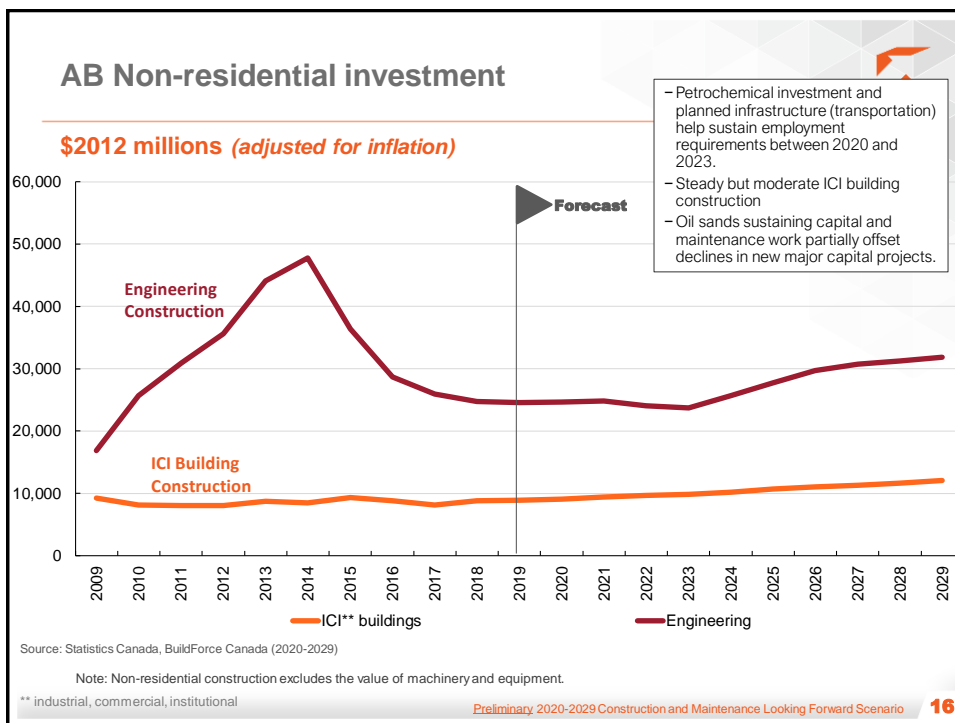
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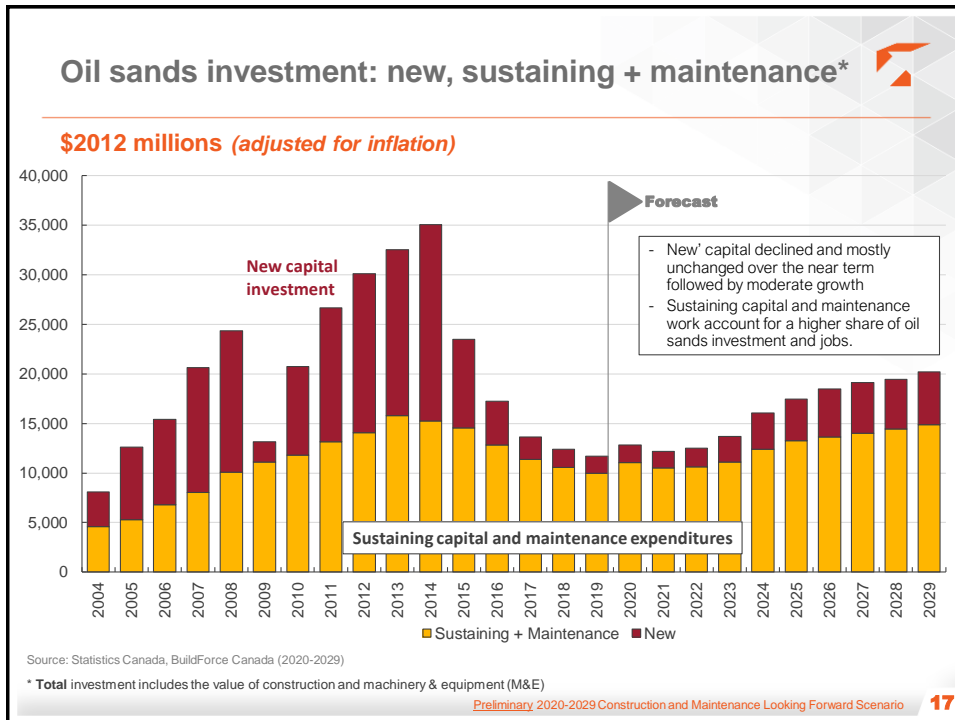
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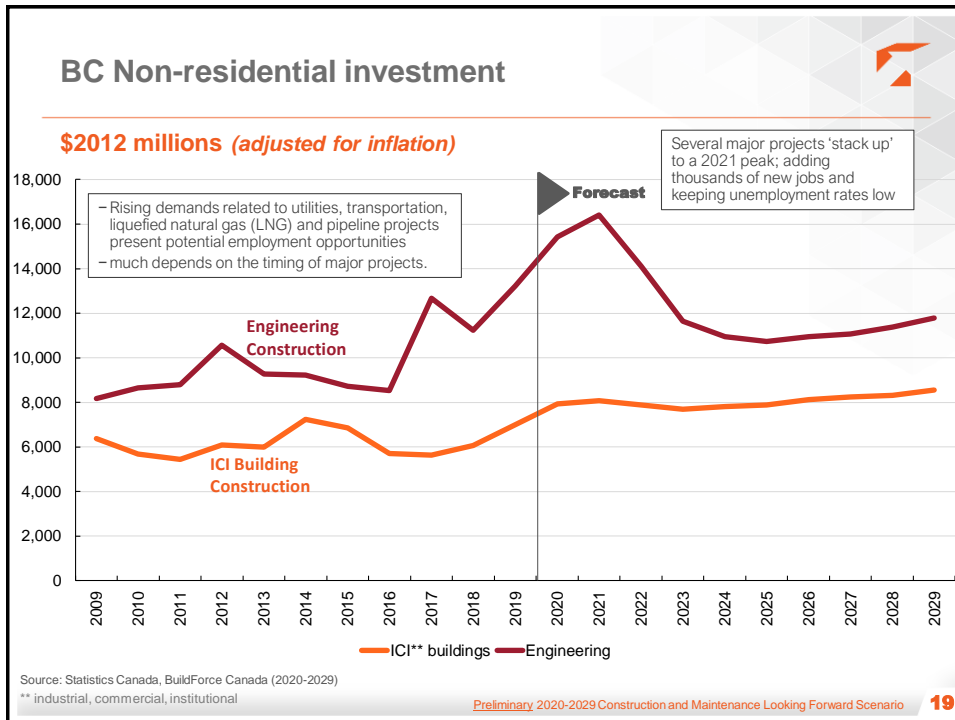
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BC – Select current and proposed major projects

Company: Project Name	Construction Dates
-- Transportation & warehousing	
Shell: LNG Canada Facility	2018:1-2023:4
TC Energy: Coastal Gaslink (Shell: LNG Canada Facility)	2019:1-2022:1
Pacific Oil & Gas: Woodfibre LNG Facility	2019:3-2021:2
Fortis BC Energy Inc: Eagle Mountain Gas Pipeline	2019:3-2021:2
Trans Mountain Pipeline (TMX) Twinning	2020-2022
Vancouver Airport Authority: International Airport Expansion	2019-2029
BC MTI / TransLink: Millenium (Broadway) Line	2020:1-2025:4
BC MTI / TransLink: Surrey LRT	2020:3-2024:3
Vancouver Fraser Port Authority: Roberts Bank Container Expansion Program	2020-2026
-- Utilities	
BC Hydro: Peace River Site C Dam	2015:3-2024:4
Elk Valley Water Quality Plan	2018-2022
Capital Region District: Core Area Wastewater Management Program	2017:2-2020:4
North Shore Wastewater Treatment Plant	2018:1-2021:3
-- Health & educational services	
St. Paul's Hospital	2020:4-2027:4
Royal Columbian Hospital Redevelopment - Phase 2/3	2020:2-2026:4
Grandview Heights Secondary School	2019:2-2021:2
-- Roads, highways and bridges	
TransLink: Patullo Bridge Replacement	2019:4-2023:4
BC Ministry of Transportation: Highway 1 Improvements	2018:3-2023:3
BC Ministry of Transportation: George Massey Tunnel Replacement	2024-2029

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Key Highlights

- General trends, **investment slows**:
 - more **moderate employment growth** compared to last two decades; **stronger levels of activity in Ontario and British Columbia**.
 - uncertainty around timing for proposed new resource development projects across Canada (e.g., *FIDs mining, pipeline, oil and gas*).
 - labour demand shifts more to infrastructure renewal, higher levels of industrial, commercial, and institutional (ICI) building construction and rising maintenance work.
- Market challenges:
 - replacing an aging workforce / **expected retirements**
 - slower population growth; **less youth available** to enter the labour force.
 - **competition against other industries** facing similar increases in age-demographic challenges.
 - sustain **commitment to recruiting, training and retention**, even during period of slow growth in some regions.
 - **recruitment of underrepresented groups** into the construction labour force – women, Indigenous peoples, and new Canadians
 - Intra (*across regions within a province*) / inter (*across provinces*) mobility to **meet peak demand** needs (**ON / BC**).

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Demographic Trends



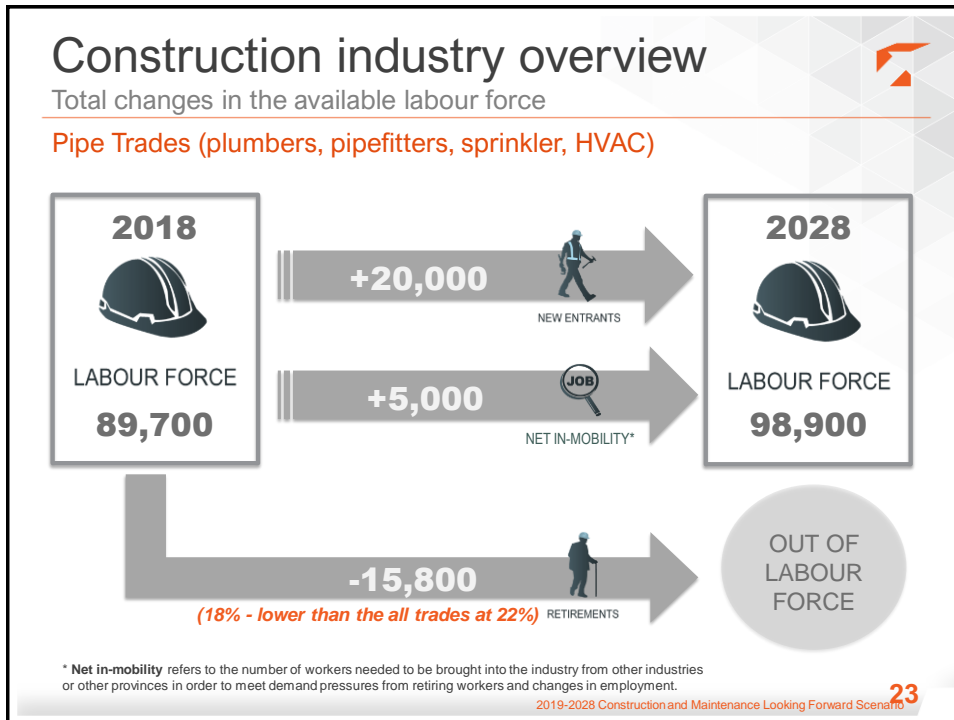
RETIREMENTS

- Canada-wide, over **22%** of the current construction workforce is expected to retire over the next decade, or an estimated **261,000** workers.
 - **Pipe trades (plumbers, pipefitters, sprinkler, HVAC); ~15,800 (18%, lower than the all trades 22% average)**
 - **Higher retirement risk in Atlantic Canada**
- This represents a **significant loss of skilled and experienced workers**.
 - slower population growth; less youth available to enter the labour force.
 - competition against other industries facing similar retirement challenges.

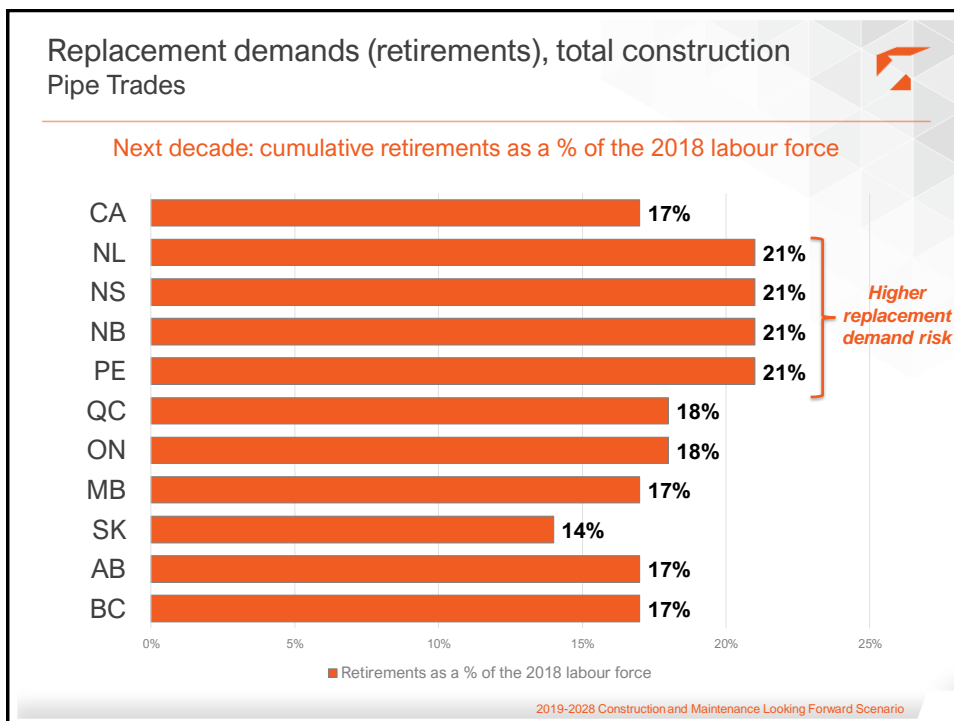
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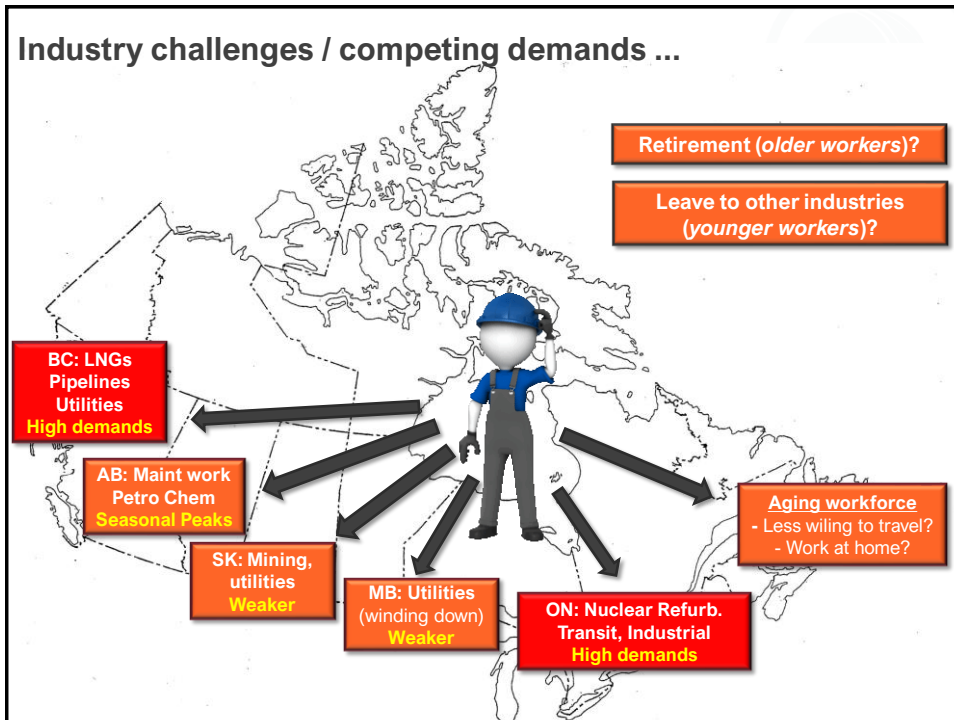
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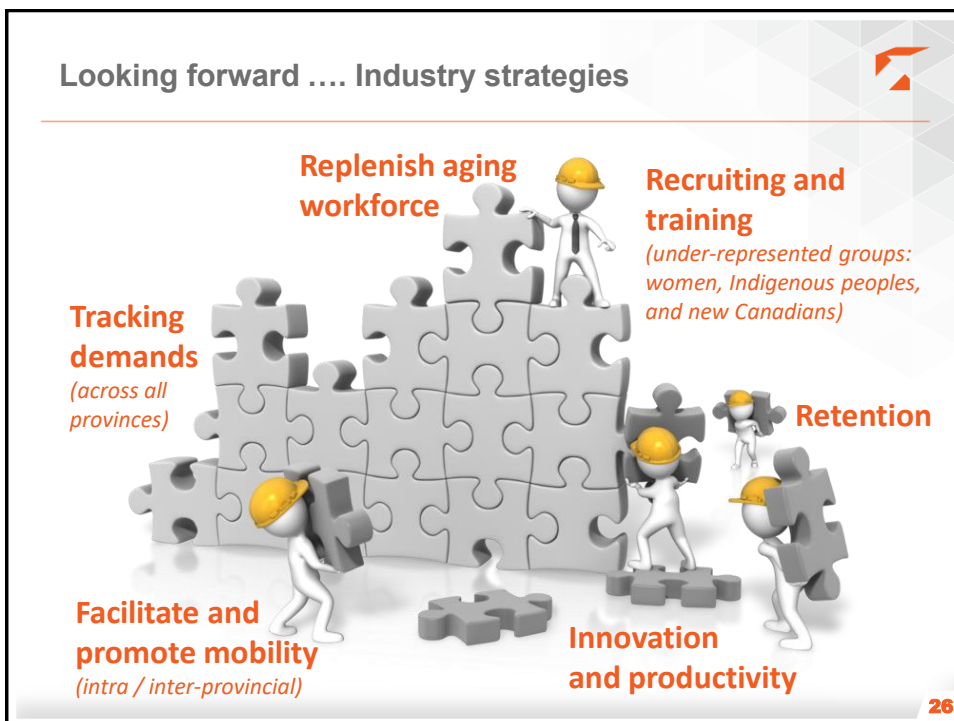
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