Potential Supply/Demand Mismatches in the Canadian Housing Stock

March 22, 2019

CANADIAN CENTRE FOR ECONOMIC ANALYSIS

Overview

PRELIMINARY RESULTS

- Background
- Scenarios:
  - Supply
  - Demand
- Results:
  - Supply Overview
  - Demand Overview
  - Supply/Demand Mismatches
- Conclusions

Background

- Long-term balance between supply and demand is critical to ensure all households can meet their core housing need
  - Affordable: Less than 30% of household income
  - Suitable: The dwelling is sufficient size of the household
  - ,Adequate: Dwelling is in a state of good repair

- If demand exceeds supply,
  - Growth ownership prices and rents may exceed incomes
  - Affordable dwellings may be unsuitable or inadequate for households
- If supply exceeds demand,
  - Investment in rental (purpose-build or secondary) may not be economical
- Demand and supply are geographically sensitive
  - Supply of dwellings must geographically match demand

Supply Trends

PRELIMINARY RESULTS

- Housing stock is modelled by:
  - Geographic location (CSD)
  - Dwelling type
    - Single-detached
    - Semi-detached
    - Row
    - Duplex
    - Short Apartment
    - Tall Apartment
  - Intended Market:
    - Ownership
    - Rental
  - Number of bedrooms

Supply Trends: Scenarios

PRELIMINARY RESULTS

- Construction rates have varied considerably only the past decade

- Three supply scenarios are examined based on historical rates:
  - **Status Quo**: The 5-year average rate of completions continues
  - **Increased Construction**: The rate of completions increases to 1 standard deviation above the Status Quo
  - **Decreased Construction**: The rate of completions decreases to 1 standard deviation below the Status Quo

Demographic Trends

PRELIMINARY RESULTS

- Rates of population growth have varied over the past largely due to changing immigration rates
- Three demographic scenarios are considered:
  - **Recent trends**: Migration, birth, and death follow the recent rates including declining death rates (people living longer) and birth rates (smaller family sizes)
  - **High growth**: Increased immigration and stable birth rates
  - **Low growth**: Decreased immigration
- In all cases, the average household size is decreasing causing the demand for dwellings to increase faster than the population
  - Though the size of dwellings demanded is less, a greater number are required

Results: Supply Overview

Supply Results

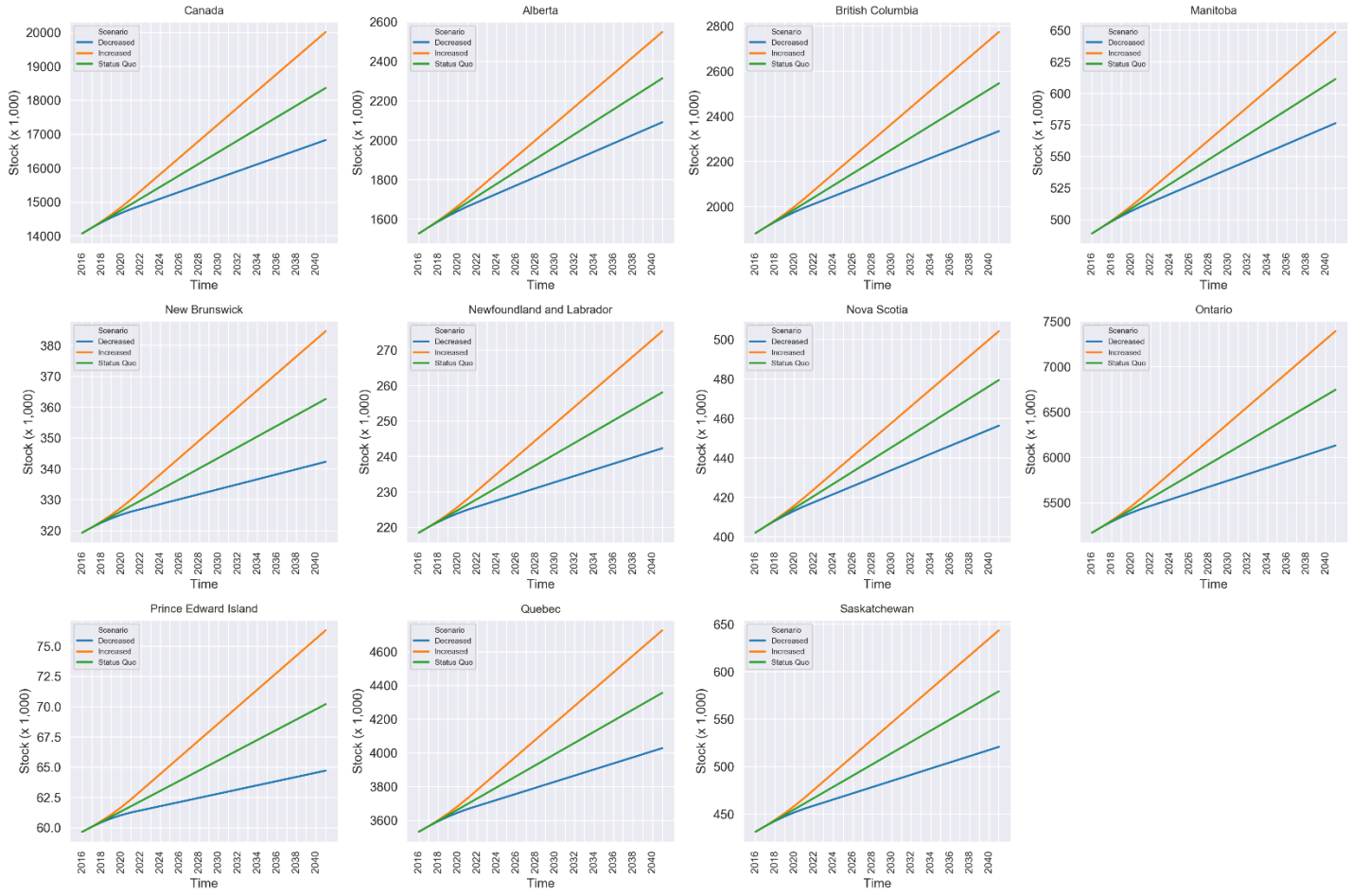
PRELIMINARY RESULTS

- There are many figures included to highlight the various aspects of the changing trends between regions
- In a report, many would be included in an Appendix

Supply Results: Scenario

PRELIMINARY RESULTS

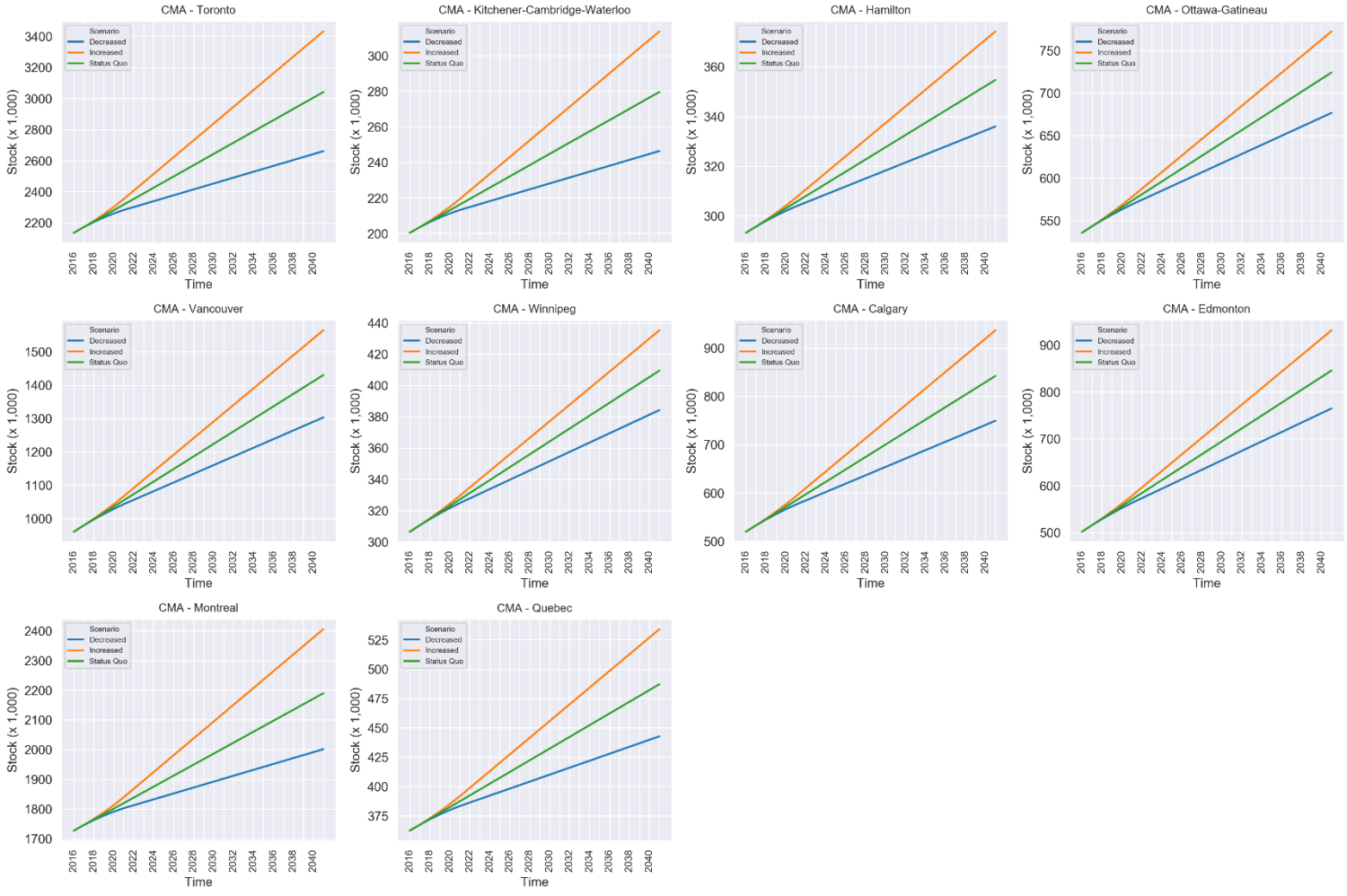
- Total stock by scenario – Canada & provinces



Supply Results: Scenario

PRELIMINARY RESULTS

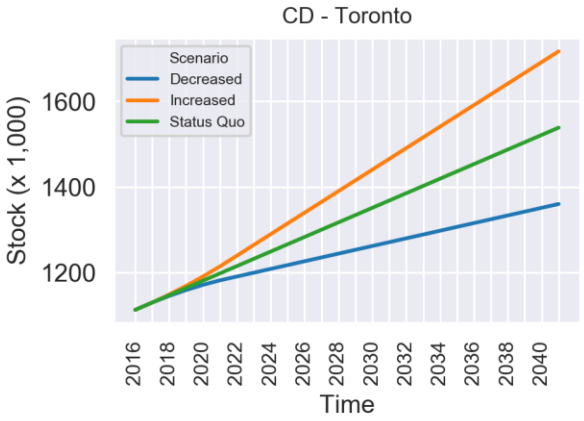
- Total stock by scenario – Top 10 CMAs (by 2016 population)

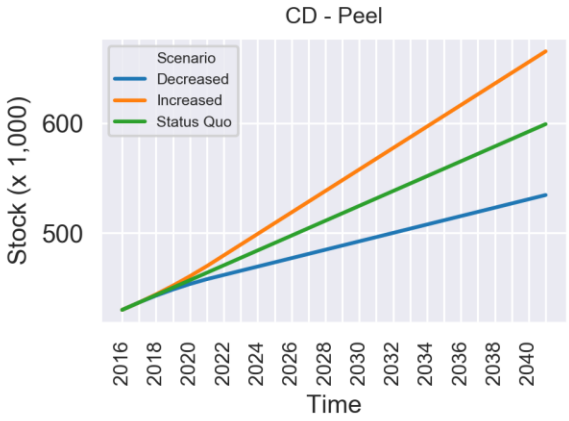


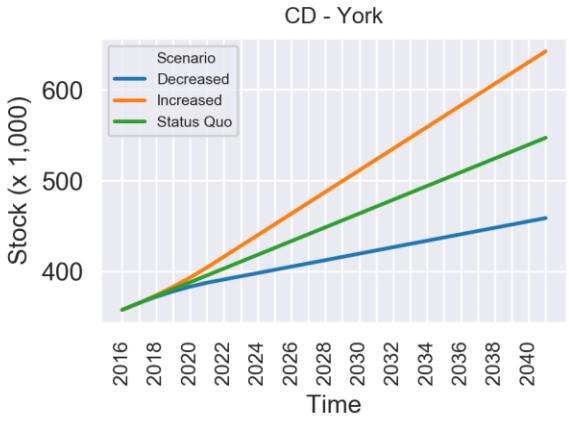
Supply Results: Scenario

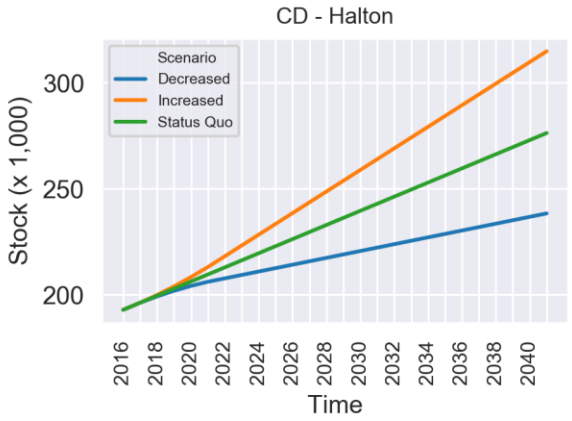
PRELIMINARY RESULTS

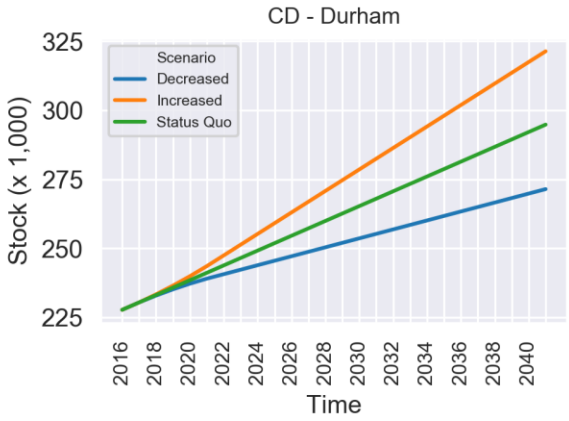
- Total stock by scenario – Select Toronto area CDs

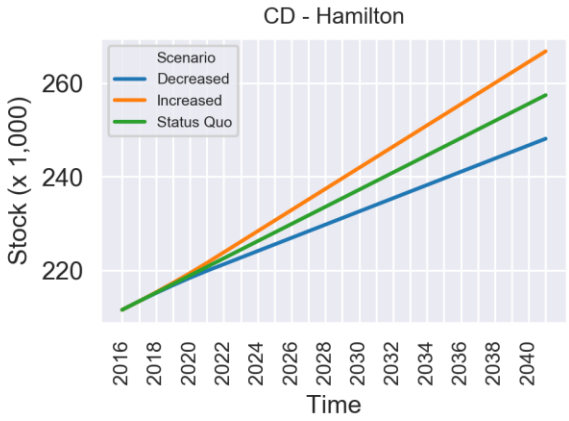








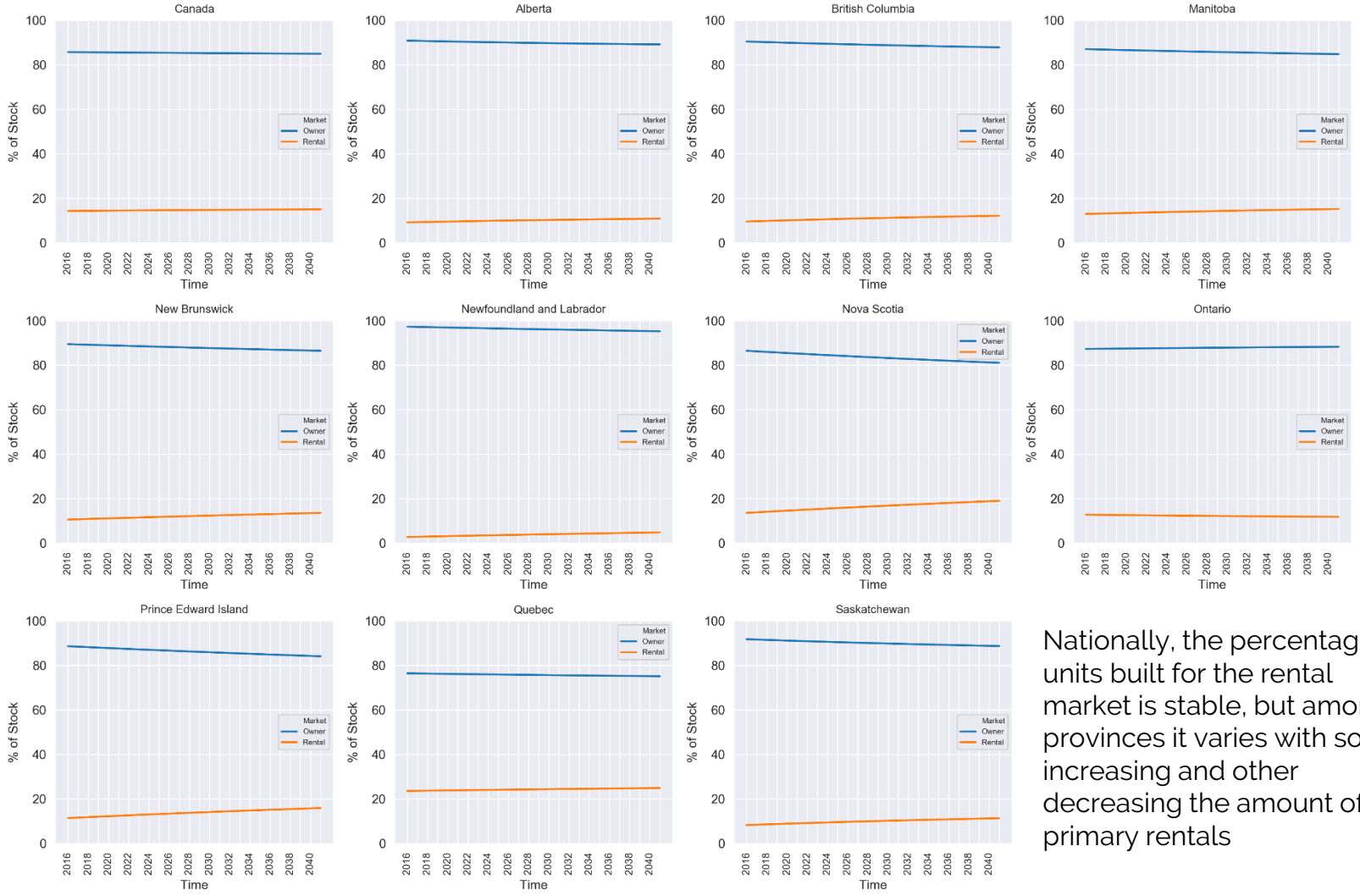




Supply Results: Status Quo

PRELIMINARY RESULTS

- Intended Market – % of Total Stock

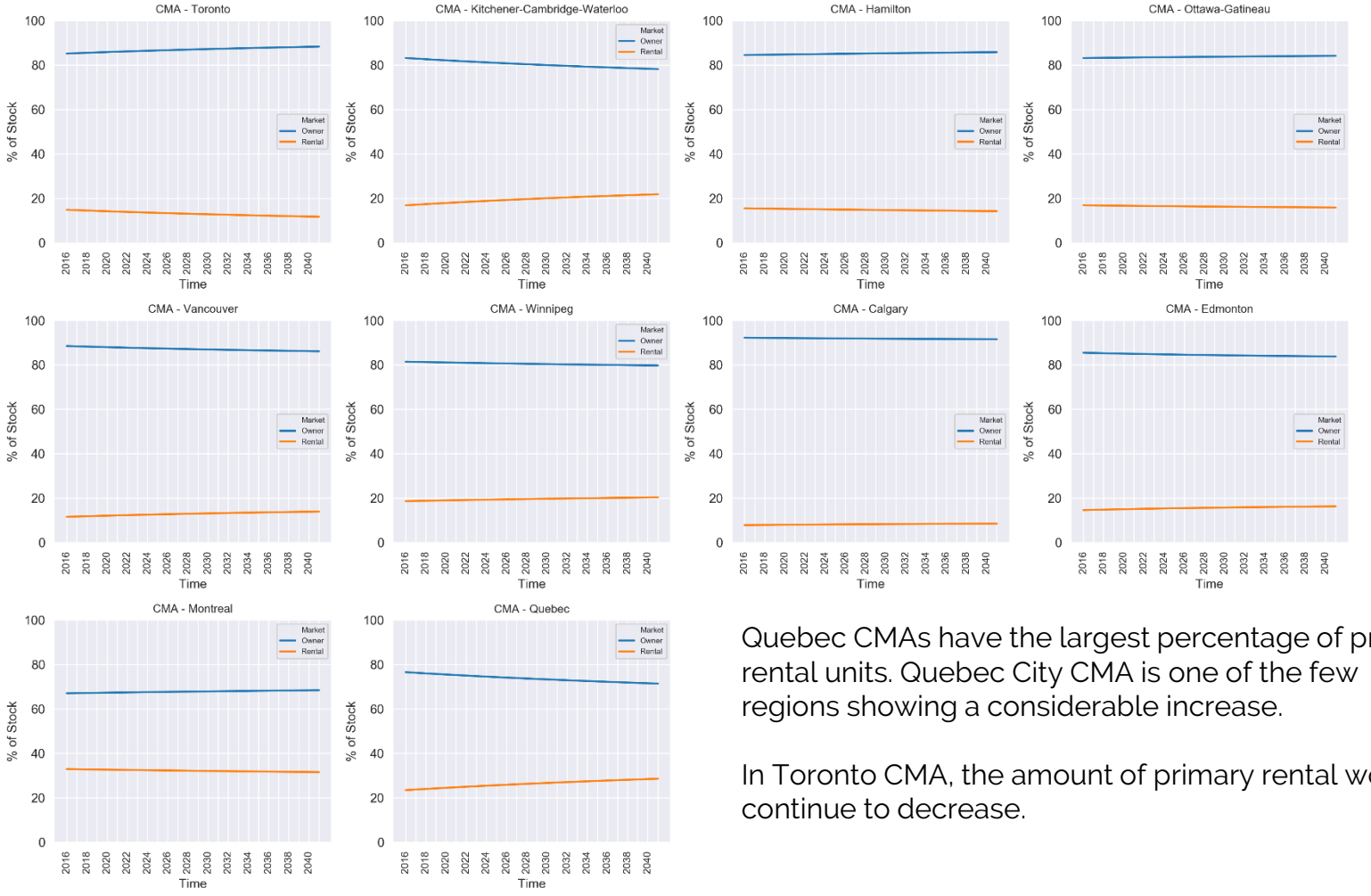


Nationally, the percentage of units built for the rental market is stable, but among provinces it varies with some increasing and other decreasing the amount of primary rentals

Supply Results: Status Quo

PRELIMINARY RESULTS

- Intended Market – % of Total Stock



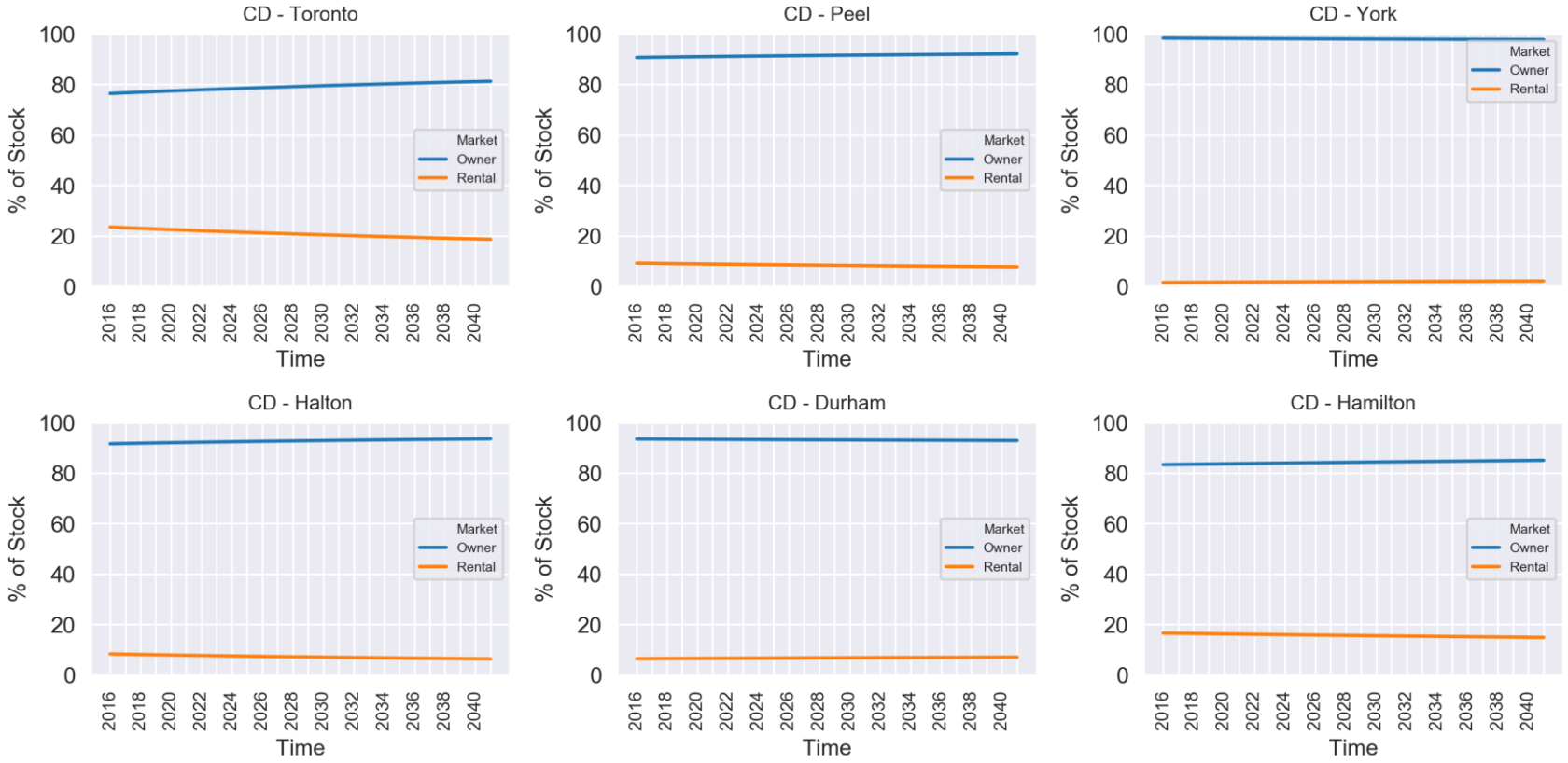
Quebec CMAs have the largest percentage of primary rental units. Quebec City CMA is one of the few regions showing a considerable increase.

In Toronto CMA, the amount of primary rental would continue to decrease.

Supply Results: Status Quo

PRELIMINARY RESULTS

- Intended Market – % of Total Stock

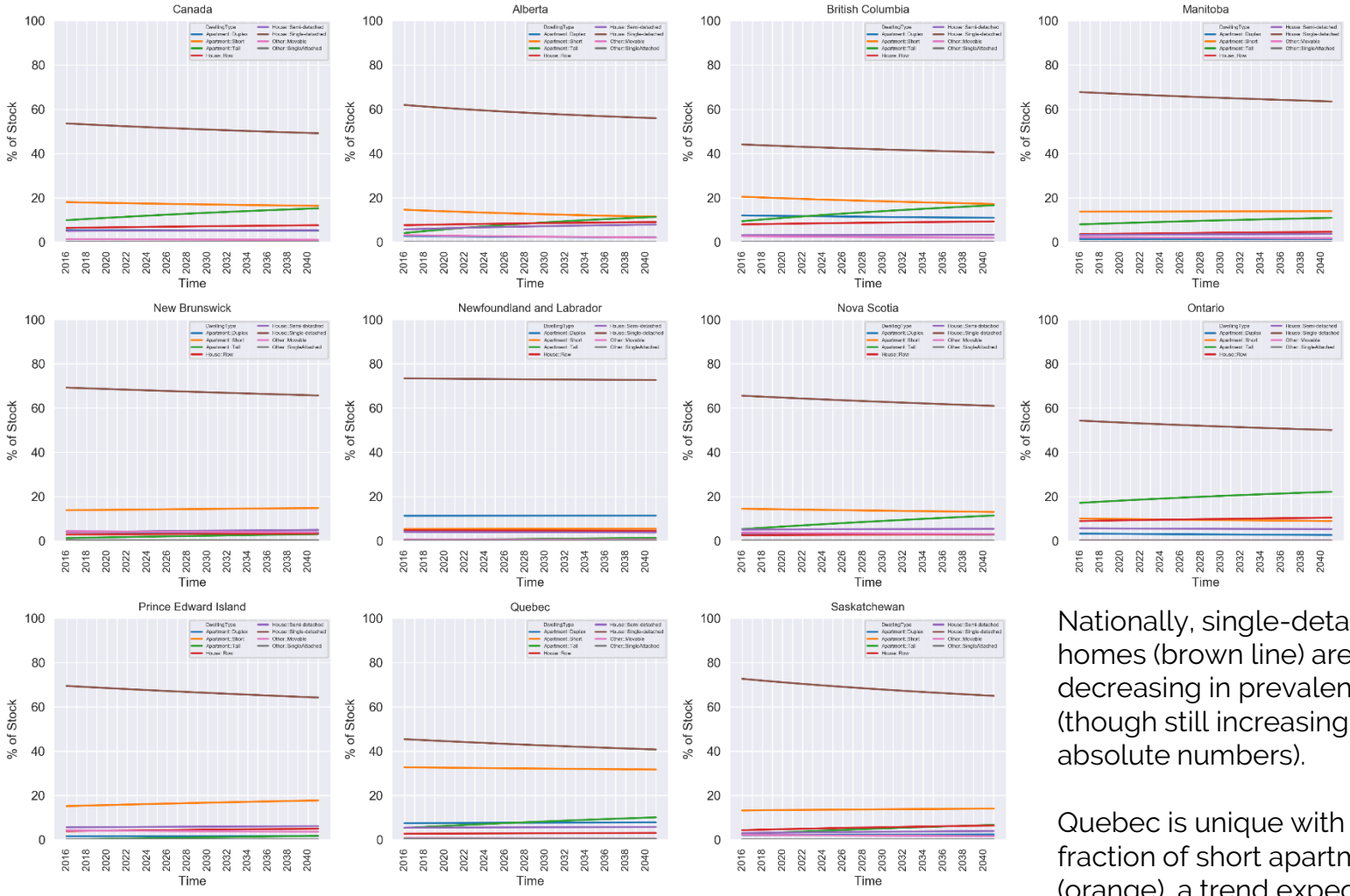


The prevalence of primary rentals across the GTA varies by region with York having almost no primary rentals. Toronto and Hamilton would see decreasing prevalence of primary rentals under the status quo.

Supply Results: Status Quo

PRELIMINARY RESULTS

- Dwelling Type - % of Total Stock



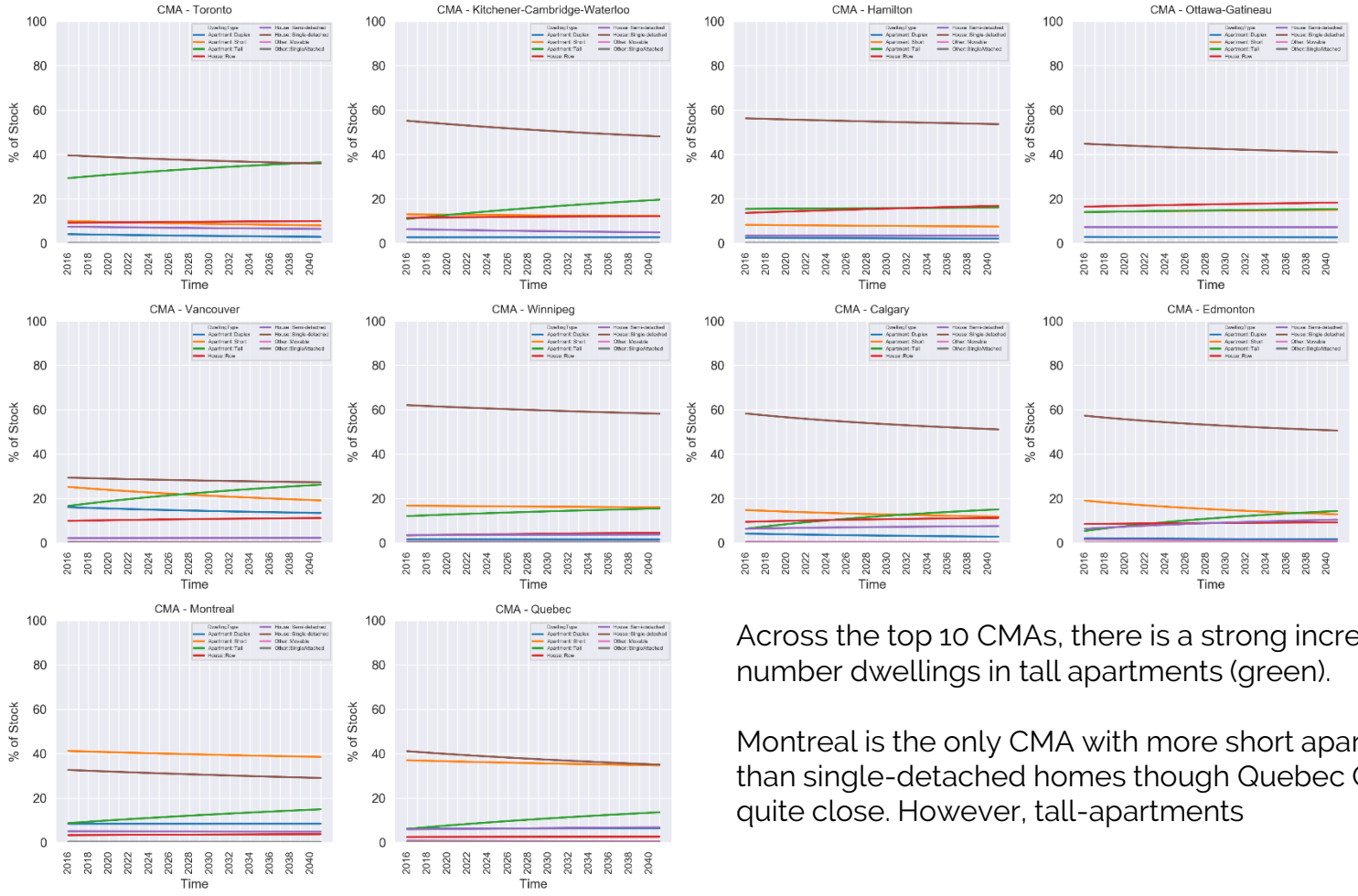
Nationally, single-detached homes (brown line) are decreasing in prevalence (though still increasing in absolute numbers).

Quebec is unique with its high fraction of short apartment (orange), a trend expected to continue.

Supply Results: Status Quo

PRELIMINARY RESULTS

- Dwelling Type - % of Total Stock



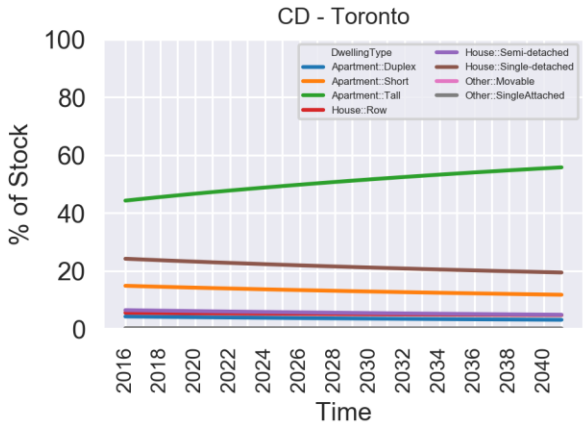
Across the top 10 CMAs, there is a strong increase in the number dwellings in tall apartments (green).

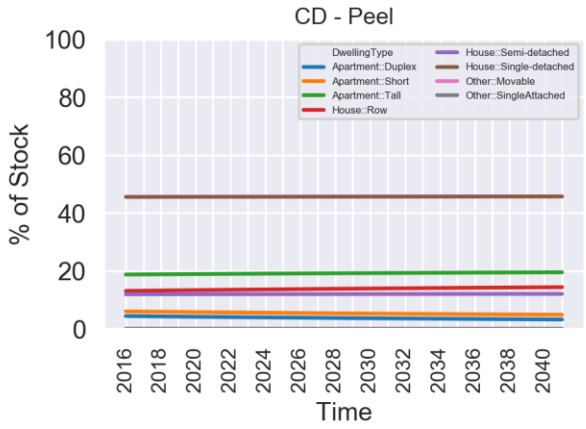
Montreal is the only CMA with more short apartments than single-detached homes though Quebec CMA is quite close. However, tall-apartments

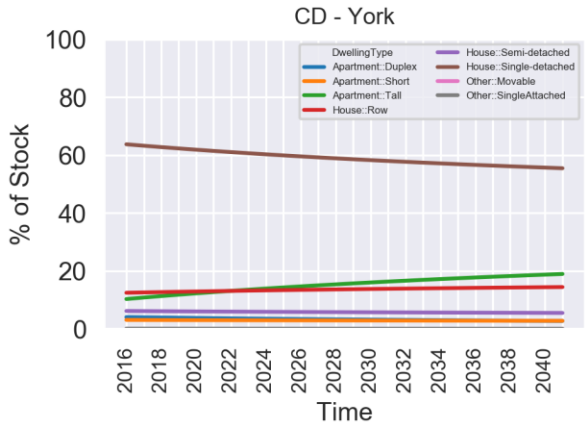
Supply Results: Status Quo

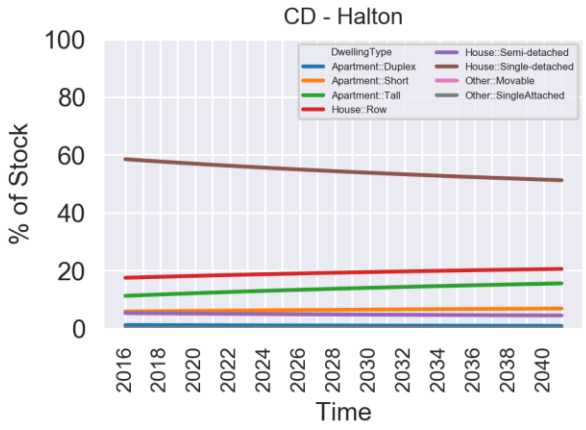
PRELIMINARY RESULTS

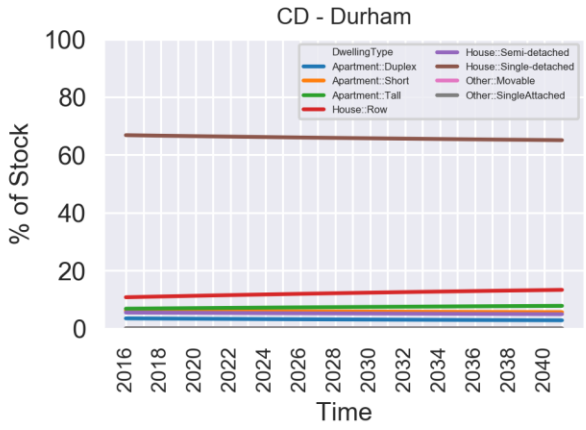
- Dwelling Type - % of Total Stock

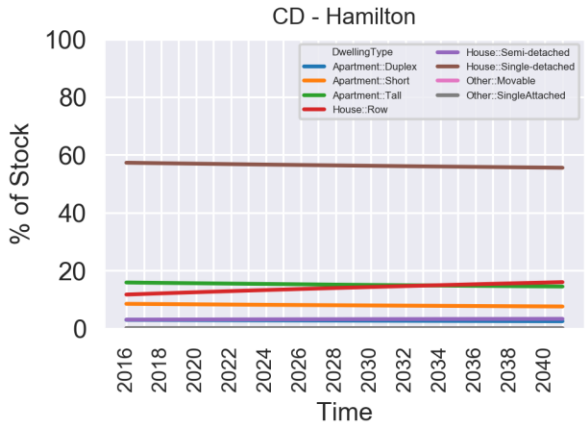










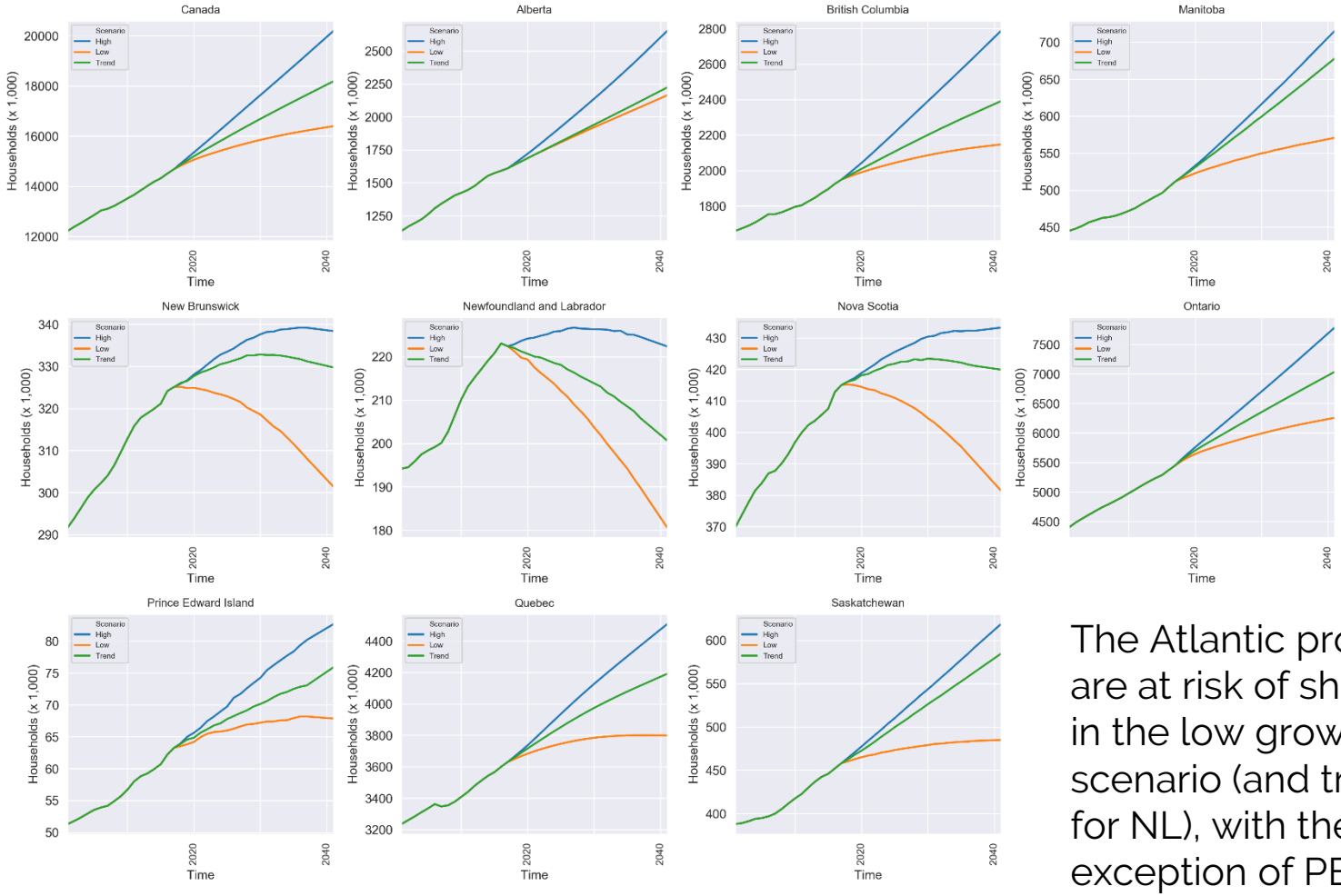


Results: Demand Overview

Demand Trends: By Scenario

PRELIMINARY RESULTS

- # of Households – By Demographic Scenario

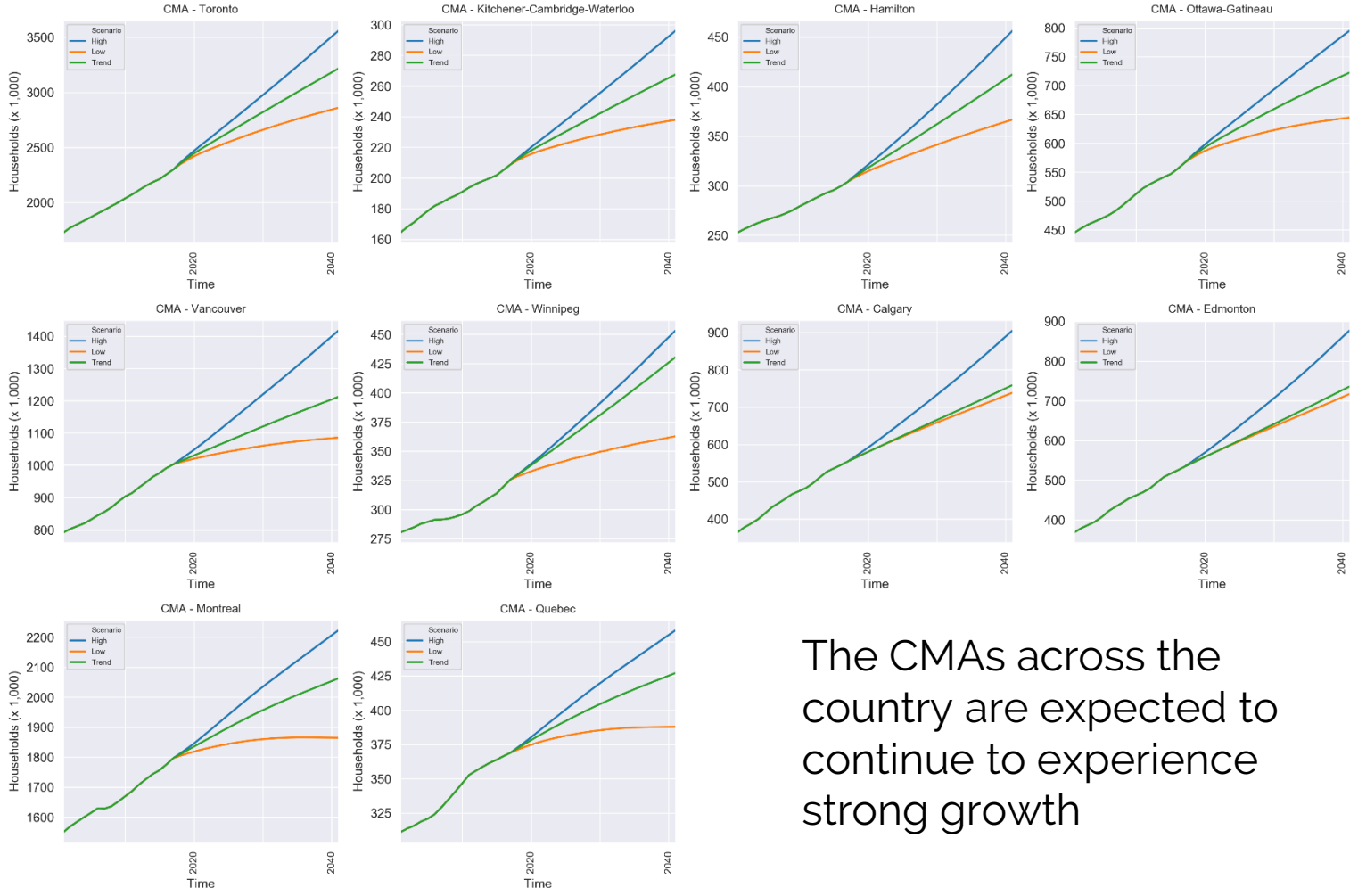


The Atlantic provinces are at risk of shrinking in the low growth scenario (and trend for NL), with the exception of PEI

Demand Trends: By Scenario

PRELIMINARY RESULTS

- Households– By Demographic Scenario

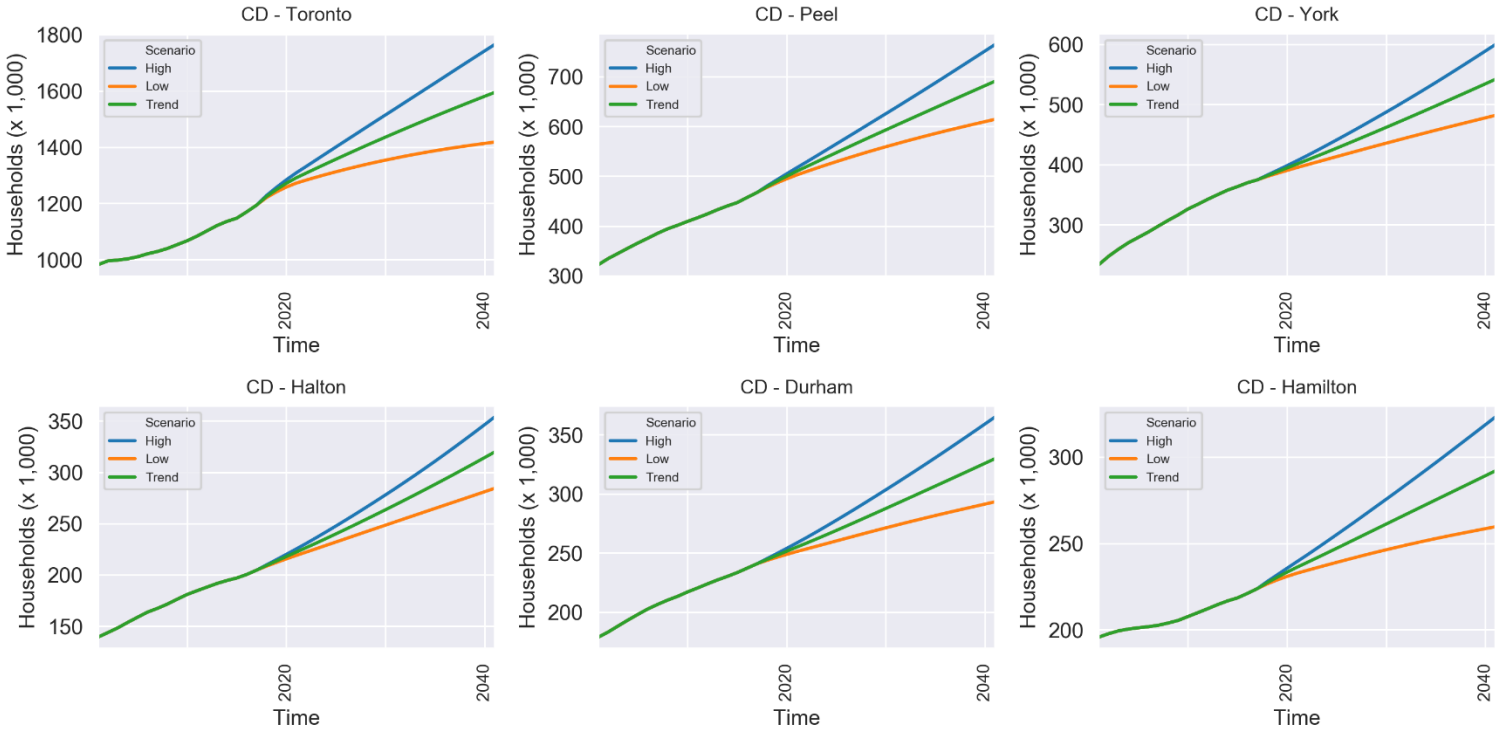


The CMAs across the country are expected to continue to experience strong growth

Demand Trends: By Scenario

PRELIMINARY RESULTS

- Households– by demographic scenario



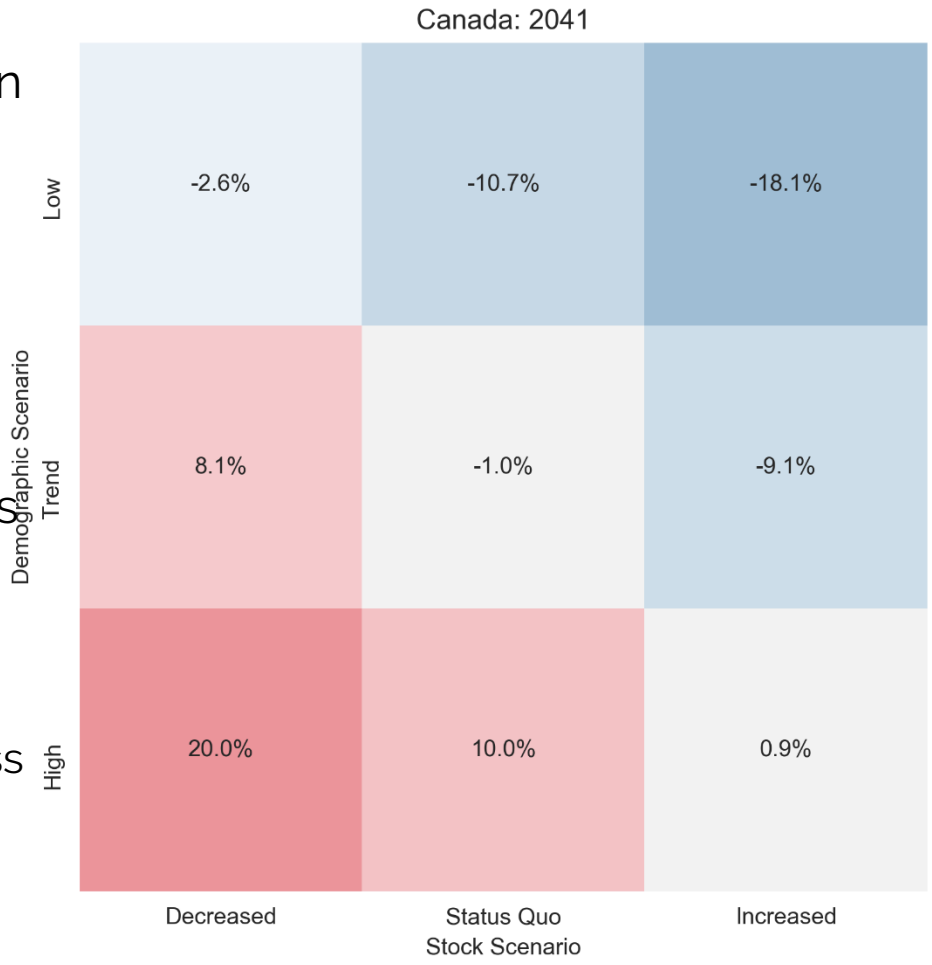
The census divisions with the GTA are all expected to experience considerable growth. Lower immigration rates results in a faster aging of the population changing demand for dwellings.

Results: Gaps

Supply/Demand Mismatches

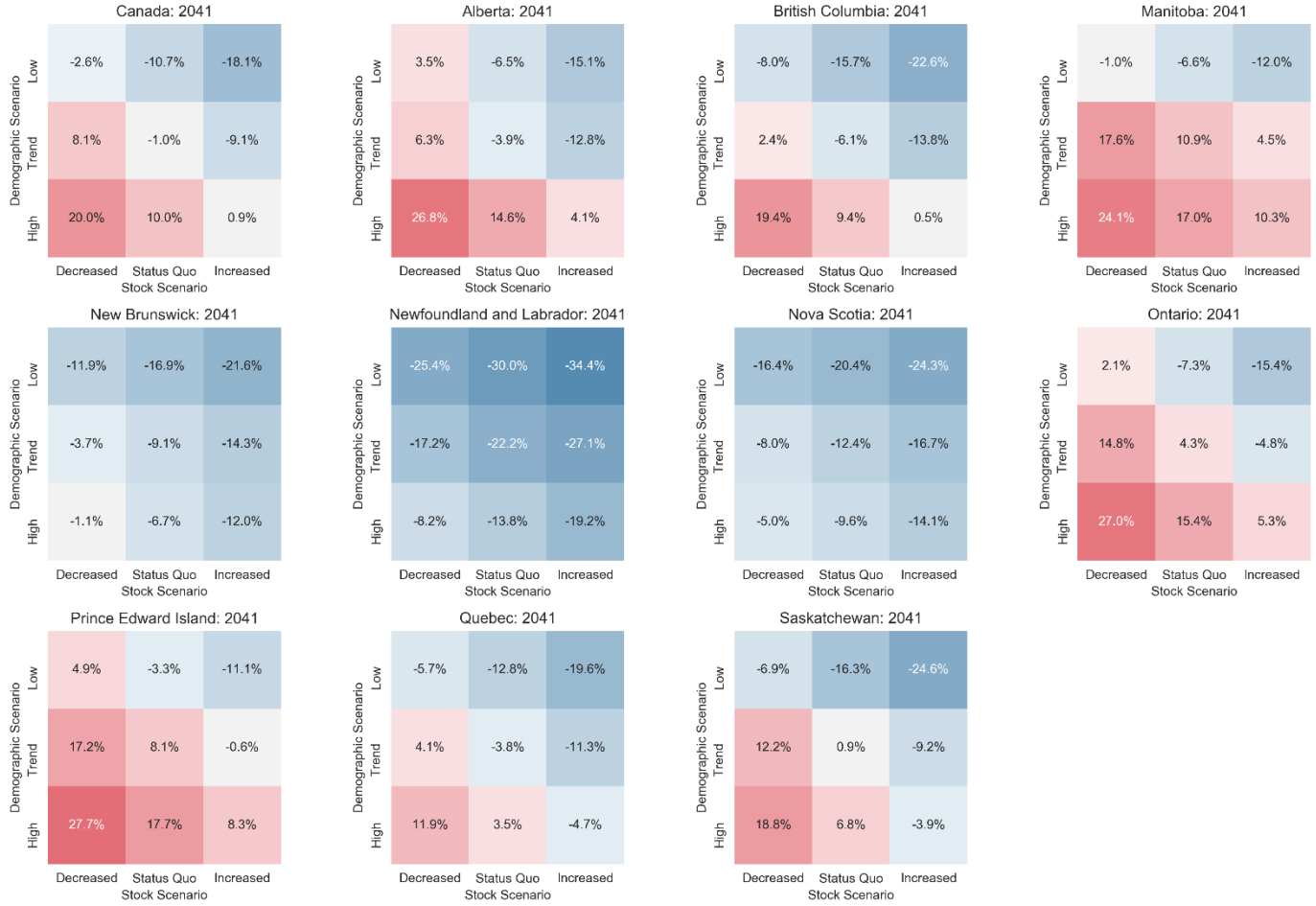
PRELIMINARY RESULTS

- Across Canada in aggregate, under the status quo construction rates and current demographic trends, the number of dwellings by 2041 is quite close to the demand
- The figure shows the excess demand relative to the stock under each of the 9 combinations of scenarios
  - Red cells indicate demand exceeds the supply
  - Blue cells indicate demand is less than supply
- However, there is significant variation across the country



Supply/Demand Mismatches

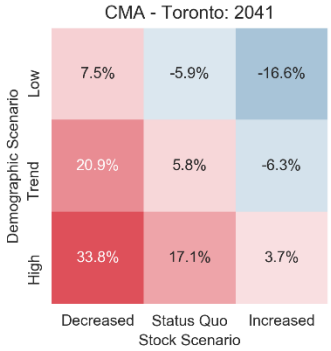
PRELIMINARY RESULTS

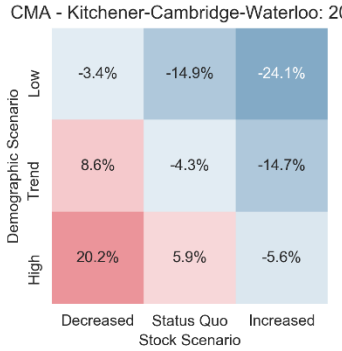


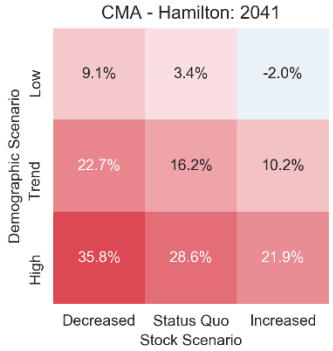
- Ontario, Manitoba, Alberta and PEI are at risk of dwelling shortfalls under the status quo combination
- The other Atlantic provinces have excess by 2041 under all combinations due to shrinking populations

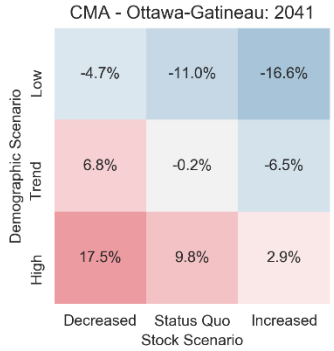
Supply/Demand Mismatch

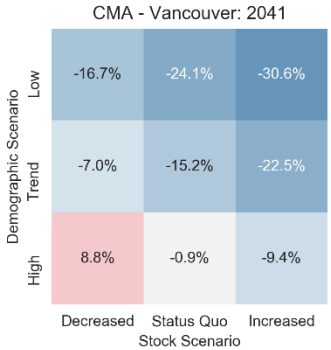
PRELIMINARY RESULTS

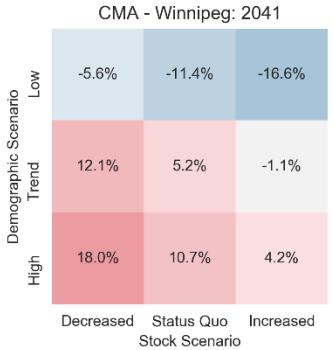


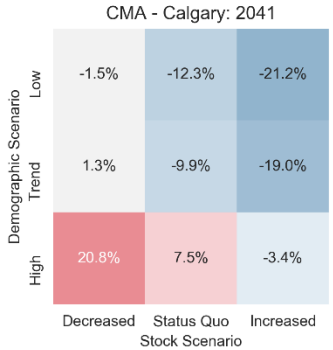


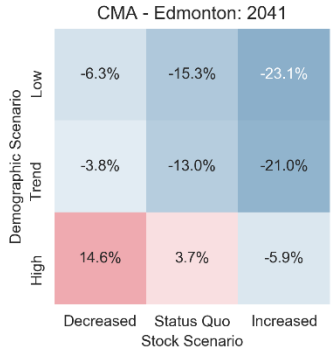


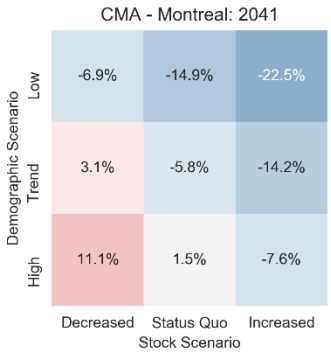


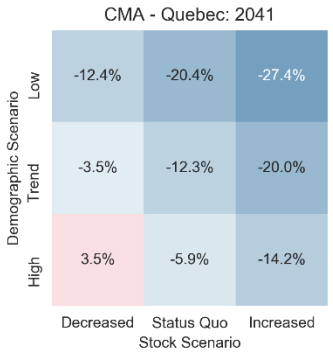












- At the CMA level, significant differences exist.
  - Quebec CMAs tend to have lower gaps
  - Ontario's CMAs have larger gaps
- The large immigration component of Ontario's growth results it demand being very sensitive to the demographic scenarios

Supply/Demand Mismatch

PRELIMINARY RESULTS

- Across the GTA, there is significant risk of demand exceeding supply across most combinations of scenario
  - Toronto and York are most closely aligned to meeting the status quo situation, but changes in demographic and construction tends can result in significant shortfalls
  - This effect of demographic scenarios are amplified due to the high dependence on immigration for many of these region's growth

Conclusions

Conclusions: Part 1

PRELIMINARY RESULTS

- The stock of dwellings in Canada is evolving as higher density dwellings become more prevalent across the country
  - In every province, the share of single-detached dwellings is expected to decrease as a percentage of the total stock
  - In the largest CMAs of Toronto and Vancouver, the number of dwellings in tall apartments could exceed single-detached dwellings by 2041.
  - In Quebec, short apartments are much more prevalent than in the rest of the country
- As the population ages across the country, the number of households (and hence demand for dwellings) is increasing faster than the overall population
  - Household sizes are getting smaller

Conclusions: Part 2

PRELIMINARY RESULTS

- While nationally, the aggregate supply and demand are relatively well balances, regionally, there is significant risk of demand exceeding supply
- The Atlantic provinces would have sufficient stock under most scenario combinations
  - PEI is the exception with recent growth trends exceeding construction trends (Though the total population is relatively low)
  - This is more due to slower population growth than greater construction
- The 'worst case' scenario for Ontario is a 27% shortfall in dwellings when there is low construction rates with higher immigration.
  - This corresponds to over 1.5 million units
  - In practice, such a shortfall would inhibit the population from growing and have significant negative impact of affordability
- The relatively small changes in demographics and construction trends (+/- 1 std dev of historical values) highlight how various policies can interact to impact supply/demand gaps in housing stock
  - Adjusting immigration policy without considering housing, or vice-versa, can have significant impact on gaps between supply and demand

Future Research Questions

PRELIMINARY RESULTS

- Does the labour market exist in each region to be able to meet any demand gaps? Issues include:
  - Labour mobility
  - Affordability impacts of increased labour competition
  - Training and apprenticeship given changing type of construction (single-detached to tall apartments)
  - Skilled immigrants

- What are the economic benefits or consequences of meetings or not meeting demand? Issues include:
  - Attraction of labour force for local economic growth
  - Quality of life within neighbourhoods
  - Substitution of expenditures on rent/mortgage for other consumption or savings

- What strategy could be used to mitigate long term risks?
  - Demographics demand can change more quickly than supply policies. Are there more responsive approaches to developing housing stock?

- What land use policies may help minimize any mismatches?