### **Yukon Bureau of Statistics**



#### Experimental Indexes of Economic Activity for Yukon March 2021

#### **Highlights:**

- On a **year-over-year** basis, the March 2021 LASSO-based experimental index of economic activity increased in all provinces and territories (where data was available), with the exception of Alberta (-1.0%).
- On a **month-over-month** basis, the LASSO-based experimental indexes also increased in March 2021 compared to February 2021 (revised) in all provinces and territories (where data was available), with the exception of a small decrease in Yukon (-0.4%).

Timely measures of economic activity are critical for understanding how economies perform, and for informing policy responses to macroeconomic fluctuations. The onset of the COVID-19 pandemic emphasized the need to produce new monthly measures of aggregate economic activity for the provinces and territories, in advance of the annual estimates of gross domestic product. Monthly experimental economic activity indexes were created by Statistics Canada at the sub-national level using three different statistical methods to combine a range of economic indicators from a number of areas (i.e., labour market, merchandise trade, manufacturing production, consumer prices, electric power data, housing, wholesale and retail trade, food services and drinking places, vehicle movement between Canada and US, building permits) into composites:

- 1) Simple economic activity index: assumes that total employment, total exports and total retail sales contain the appropriate information for understanding aggregate economic fluctuations; not available for Yukon.
- 2) **Principal component analysis (PCA) index**: uses a variable reduction technique to capture the variation in the input data set using a smaller number of principal components.
- 3) Least absolute shrinkage and selection operator (LASSO): uses a shrinkage and selection method to select series from the input data set to be included in a regression to explain annual growth.

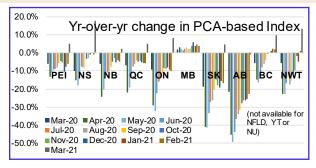
The indexes are experimental and not based on economic theories, and therefore, should be **interpreted with caution**. Models employed typically have a different set of inputs for each province or territory. As a result, may affect interjurisdictional comparisons.

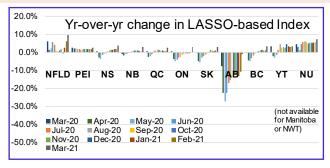
Source: Statistics Canada. Data table 36-10-0633-01. For further information, see: Experimental Economic Activity Indexes for Canadian Provinces and Territories: Experimental Measures Based on Combinations of Monthly Time Series

## **Year-over-year** Changes in Economic Activity Indexes, Provinces and Territories, Mar 2020 to Mar 2021 Compared to Respective Month Mar 2019 to Mar 2020

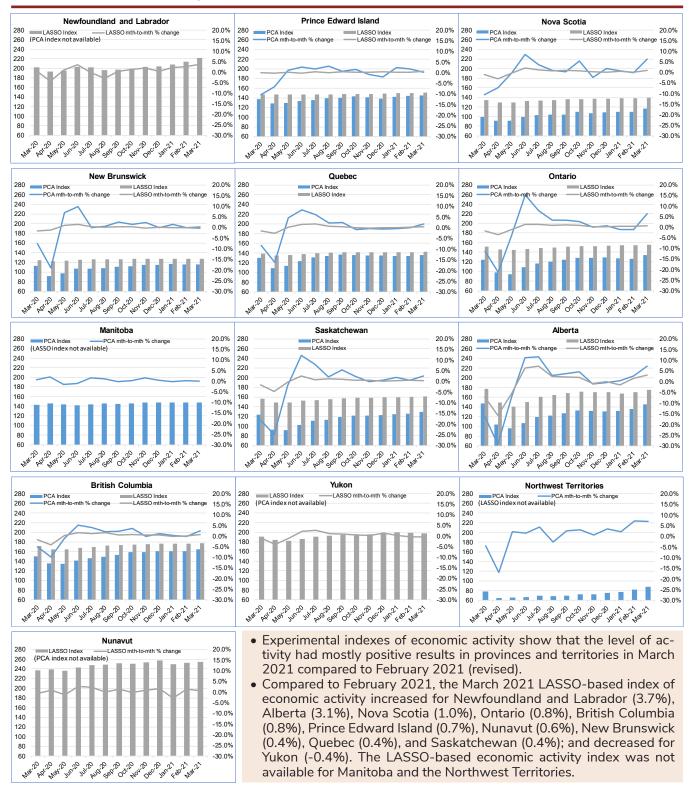
Note: The PCA-based indexes generally show larger changes than the LASSO-based indexes because they include a larger set of input series in their construction and therefore, capture more variability.

- The PCA-based experimental index shows that most provinces and territories (not available for Newfoundland and Labrador, Yukon and Nunavut) have experienced decreased economic activity in months from March 2020 to February of 2021 (revised) compared to the respective month in 2019 and 2020 (revised), except for Manitoba (increased in all months), British Columbia (mixed results) and the Northwest Territories (mixed results). However, comparing March 2021 to that of March 2020 (revised), all provinces and territories saw an increase in economic activity with the exception of a decrease in Alberta (-1.1%).
- The LASSO-based experimental index (revised) shows year-over-year increases in economic activity in each
  month from March 2020 through March 2021 (not available for Manitoba and the Northwest Territories) for
  Prince Edward Island and Nunavut; decreases in Alberta; and mixed results for other jurisdictions including
  Yukon. Comparing March 2021 to that of March 2020 (revised), all provinces and territories saw an increase in
  economic activity with the exception of a small decrease in Alberta (-1.0%).





# Economic Activity Indexes (January 2002 = 100) and *Month-over-month* Changes, Provinces and Territories, March 2020 to March 2021



July 2021

