

# Thunder Bay's Economic Activity Index

ISSUE FIVE  
Fall 2024

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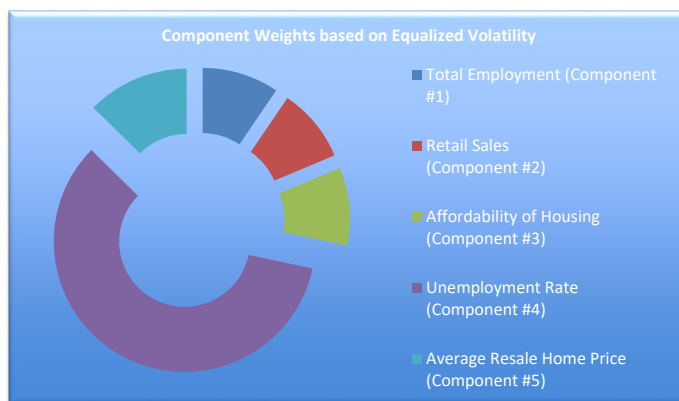
## TBEAI Background & Revision

Gross Domestic Product (GDP) measures are often used to determine the health of an economy. However, a different methodology is applied to calculate the GDP of a national versus regional economy. As a result, regional GDP estimates are subject to various assumptions, resulting in reduced reliability. Moreover, GDP measures are general and have complex compositions. Often, a regional index is used to complement GDP measures by highlighting the major factors contributing to economic activities' expansion or contraction.

In 2013, Thunder Bay Ventures (TBV) commissioned a study establishing the Thunder Bay Economic Activity Index (TBEAI). The TBEAI is a unique, customized regional index that considers the nature of Thunder Bay's economy. Its objective is to reflect better the reality and dynamic of Thunder Bay's economy and to help the community stay informed about changes in economic activity.

The TBEAI uses five major factors that signal changes in Thunder Bay's economic activity. The five factors are: i) total employment, ii) retail sales, iii) average resale home price, iv) unemployment rate, and v) affordability of housing. In the past, employment insurance (EI) benefit claims were used as part of the index; however, changes to the EI program during the pandemic (e.g., data collection suspension, the transition of Canada Emergency Response Benefit (CERB) recipients to EI, and the increase in EI eligibility) resulted in a lack of reliability and comparability. As a result, the unemployment rate was substituted into the index starting in 2022 based on empirical and theoretical economic rationale.

The following chart displays each component's weight after applying the methodology.



## Summary of Highlights

- Thunder Bay's economy has recovered from the 2020 pandemic lows and now exceeds pre-pandemic levels.
- Thunder Bay's strong growth is signalled by a sharp reduction in the unemployment rate, increasing retail sales and resale home prices, and modest employment growth.
- Thunder Bay's growth in 2022 and 2023 exceeded that of the Province, although it continues to lag over the long run.

## TBEAI Methodology

The methodology utilized to calculate the TBEAI is based on the Conference Board of Canada's model for calculating a composite index. Six steps are undertaken to calculate the TBEAI:

1. Period-to-period changes are computed for each component.
2. The period contributions of the components are adjusted to equalize the volatility of each component.
3. The adjusted period contribution across the components for each period is summed to obtain the growth rate of the index.
4. The sum of the adjusted contributions of the composite index is adjusted to equate their trend to that of the coincident index.
5. The level of the index is computed using the symmetric percentage change formula.
6. The index is rebased to average 100 in the base year.

## GDP Outlook

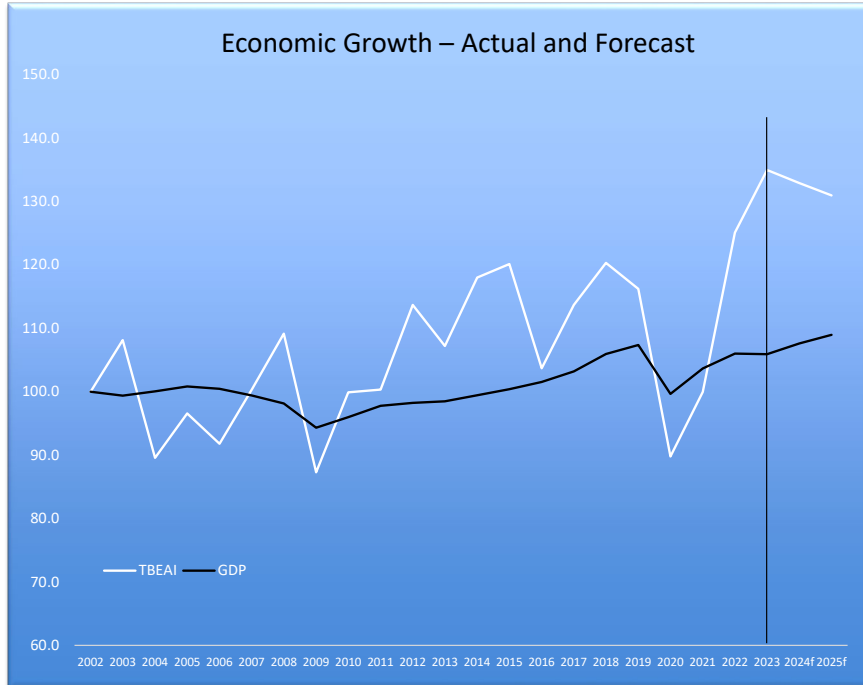
The following is the real GDP outlook for Thunder Bay

Real GDP Growth			
2017 to 2021	2022	2023	2024 to 2025
0.5%	2.3%	-0.1%	1.4%

Source: Conference Board of Canada

After two years of a strong recovery from the 2020 pandemic decline (4.0% and 2.3% in 2021 and 2022, respectively), Thunder Bay's real GDP unexpectedly declined in 2023 by -0.1%. Although the decline is relatively small, it does suggest stagnant growth during 2023.

# Thunder Bay's Economic Activity Index



## Digging deeper ...

*Thunder Bay's economy has been strong even though financial conditions in Canada have tightened over the past two years due, in part, to increasing interest rates.*

**The TBEAI signalled strong growth in recent years, exceeding the Province and the Conference Board's GDP growth estimates.**

**Various large construction projects have supported the Thunder Bay economy in recent years, driven mainly by the construction of the new \$1.2 billion jail on Highway 61.**

### 1. Ongoing \$1.2 billion Jail Construction

Thunder Bay's economy has benefited from the ongoing construction of the new \$1.2 billion jail. The 345-bed jail construction on Highway 61 began in 2022 and is expected to continue supporting local economic activity into 2026, as it is a very large project for the region. The impacts are vast and can help explain the increases in employment and reduction in the unemployment rate.

### 2. Thunder Bay's \$57 million Art Gallery

Work is also ongoing for Thunder Bay's new Art Gallery on the waterfront. The 39,000-square-foot Gallery is expected to open in 2025, and construction costs are expected to be around \$57 million. In addition to the Gallery, this new construction will provide the community with event spaces and a café.

### 3. MGH's \$32 million Hyatt House Hotel

Manitoba's Genesis Hospitality (MGH) is investing \$32 million to build a Hyatt House extended-stay hotel on Oliver Road. The hotel is expected to be six stories and have 129 units. It will be near the Thunder Bay Regional Health Sciences Centre and Lakehead University.

**TBEAI suggests more substantial growth over the past two years than GDP growth but forecasts a pullback in 2024 and 2025.**

**The TBEAI shows that Thunder Bay's economy continued its post-pandemic recovery and experienced robust economic growth over the past two years, with growth in 2022 being well above historical averages. The TBEAI shows that Thunder Bay's economy has now fully recovered from the pandemic and grown beyond pre-pandemic levels.**

**Four of the five indicators signalled economic growth in 2022 and 2023, including a sharp decline in the unemployment rate in 2022, along with robust growth in retail sales and average real estate resale prices and modest total employment growth. Housing affordability is the only indicator that consistently deteriorated over the past two years.**

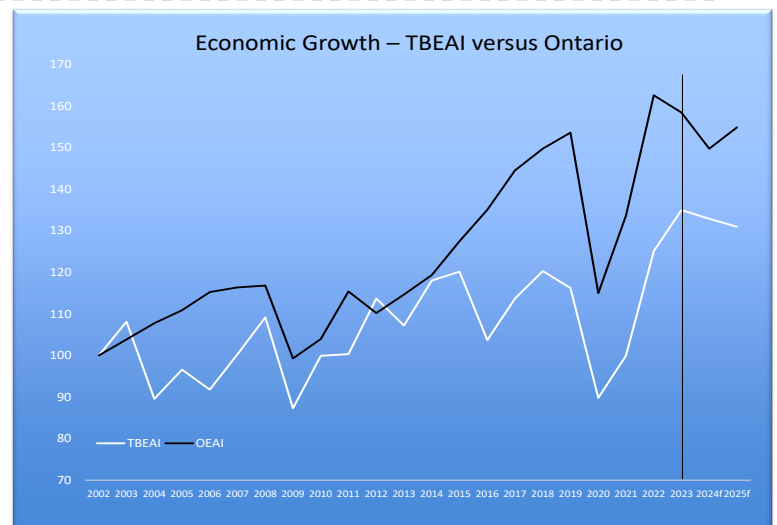
**The growth signalled by the TBEAI is much larger than that signalled by the Conference Board's GDP, which signalled more modest growth in 2022 and 2023.**

**TBEAI suggests that Thunder Bay's economic growth surpasses the Province in '22 and '23.**

Although Thunder Bay continues to lag behind the Province in the long run, the TBEAI relative to the Ontario Economic Activity Index (OEAI) reveals that Thunder Bay's economic growth exceeded the Province's in 2022 and 2023.

Thunder Bay's superior performance over the past two years is driven by a sharp decrease in the unemployment rate, growth in the average resale price of real estate, and less of a deterioration in the affordability of housing. Retail sales and employment growth have kept pace with the Province.

Moving forward, both the TBEAI and OEAI signal more tempered economic activity for 2024 and 2025.

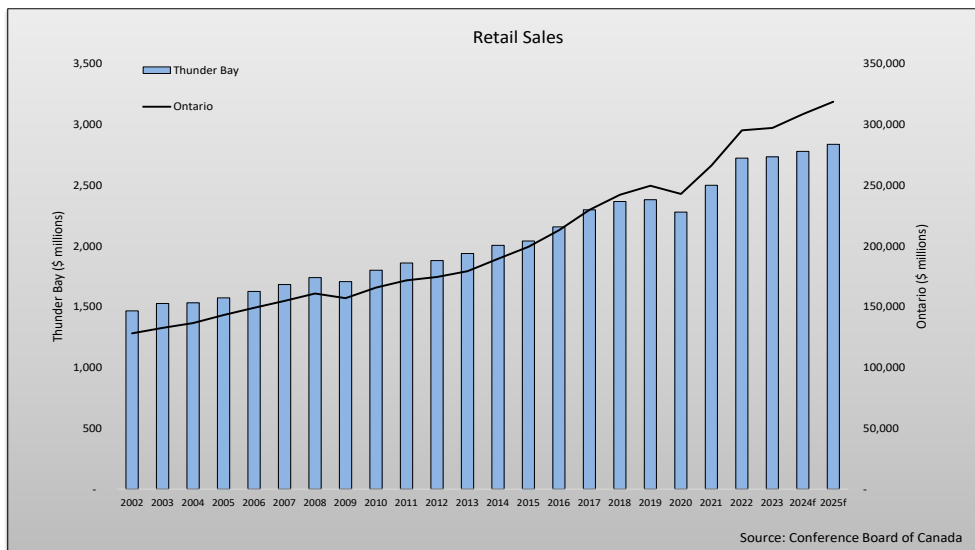


## After two years of stellar growth, retail sales growth slows in 2023 (Component #2)

Retail sales in Thunder Bay increased significantly in 2021 (9.7%) and 2022 (8.9%), well above the historical average annual increase over the past 20 years ( $\approx 3\%$ ). The significant growth in 2021 and 2022 is consistent with the Province's experience.

However, retail sales in 2023 grew by only 0.4%, one of the lowest increases over the past 20 years other than 2020 (pandemic) and 2009 (Great Financial Crisis). Retail sales growth in 2023 for Ontario as a whole is also well below historical averages.

The Conference Board forecasts retail sales to increase in 2024 and 2025 but still remain below historical average growth rates.



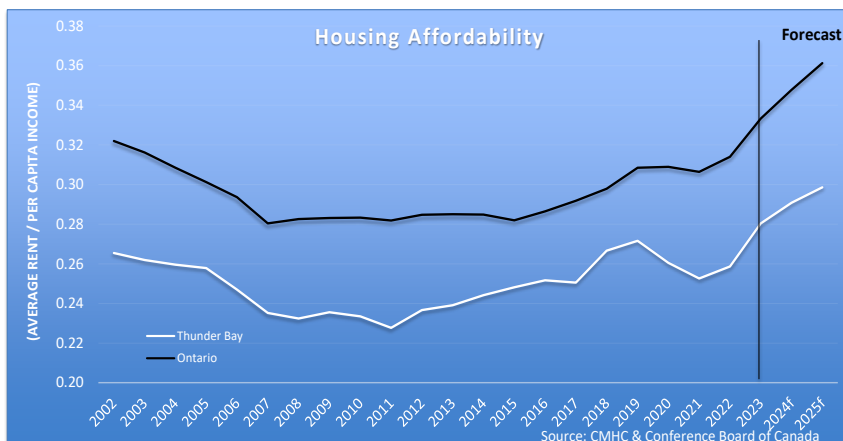
## Average resale prices increase beyond Province over past two years (Component #5)

Thunder Bay's average resale real estate prices experienced robust growth in 2021 and 2022 (i.e. 14.8% and 10.3%, respectively), with continued price increases in 2023 ( $\approx 2.1\%$ ) even though the Province experienced a pullback ( $\approx -6.3\%$  in 2023).

## Housing becoming much less affordable, least affordable in two decades (Component #3)

After improving during the pandemic, housing affordability has declined significantly over the past two years and is expected to continue to become less affordable. Since the pandemic, housing affordability has deteriorated to the worst levels in the past two decades for both Thunder Bay and Ontario.

Housing has become less affordable in Thunder Bay since the pandemic as increases in average rent (21.4% from 20 to 23) far exceed increases in income (12.8% from 20 to 23).



## Total employment continues recovery toward pre-pandemic levels (Component #1)

Total employment in Thunder Bay increased in 2022 and 2023 by 1.3% and 3.3%, respectively, to just under 64,000. Total employment in Thunder Bay is now slightly below the 2018 high ( $\approx 64,500$ ).

During the past two years, Ontario experienced more significant employment growth and is now at an all-time high.

Going forward, the Conference Board forecast Thunder Bay's total employment to decline in 2024 and then recover again in 2025.

A long-term view reveals that Thunder Bay's total employment has not experienced any growth over the past two decades but continues to oscillate between 59,000 to 65,000.



## Unemployment rate drops to two-decade lows in 2023 (Component #4)

After a significant spike in the unemployment (UE) rate during the pandemic, Thunder Bay experienced a substantial decrease in the UE rate during 2022 and 2023. The UE rates over the past two years are the lowest experienced over the past two decades. The post-pandemic decline in the UE rate is consistent with the general trend in the Province, indicative of a tight labour market.

Going forward, Thunder Bay's UE rate is expected to increase but only slightly and remain well below historical averages.

# Long-term sectoral shifts in employment sectors are expected to continue

## Background

- ✓ We explore Thunder Bay's shifting employment patterns by examining changes in total employment across sectors over the past twenty years.
- ✓ We begin by calculating the average employment by sector from 2000 to 2003 to form the baseline level of employment by sector. Next, we calculate the percentage change from the baseline average relative to the 2023 level.

## Long-term sectoral shifts

- ✓ Figure 1 visualizes the long-term sectoral shifts in total employment. The results reveal that the three sectors experiencing the largest percentage growth are i) health care and social assistance, ii) construction, and iii) professional, scientific, and technical services. These three sectors have all grown by approximately 50% over the past twenty years.
- ✓ The three sectors experiencing the largest declines in employment are i) manufacturing, ii) finance, insurance, and real estate, and iii) transportation and warehousing.
- ✓ We present the forecasted changes in sectoral employment in Figure 2. We calculated the forecast changes by comparing the 2023 total employment relative to the 2024 forecast. The results suggest that the long-term trends in sectoral shifts in total employment are expected to continue going forward, whereby construction and health care and social assistance sectors are expected to grow significantly over the next year. In contrast, manufacturing, finance, insurance, real estate, and accommodation and food services are forecasted to continue their long-term declines. Interestingly, the educational services sector has grown over the past twenty years but is expected to pull back going forward.

Figure 1 – Long-term shifts in employment by sector (20-year shifts)

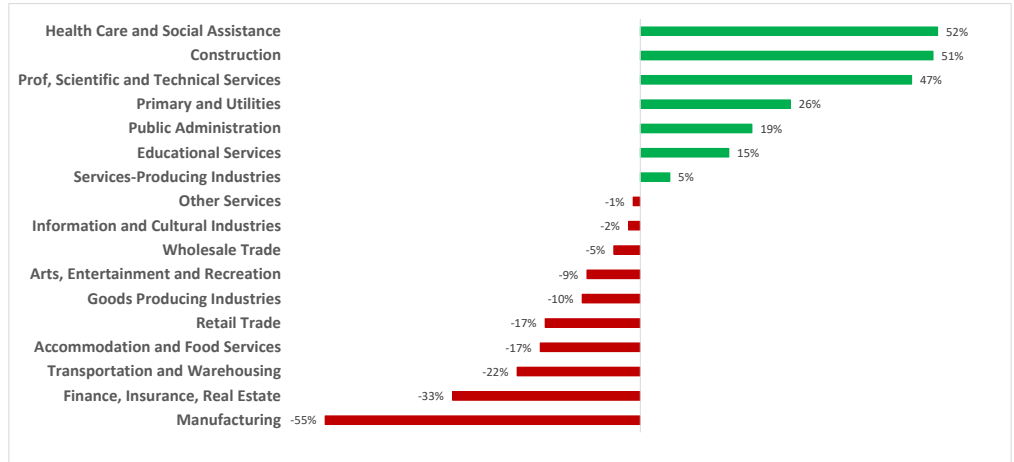
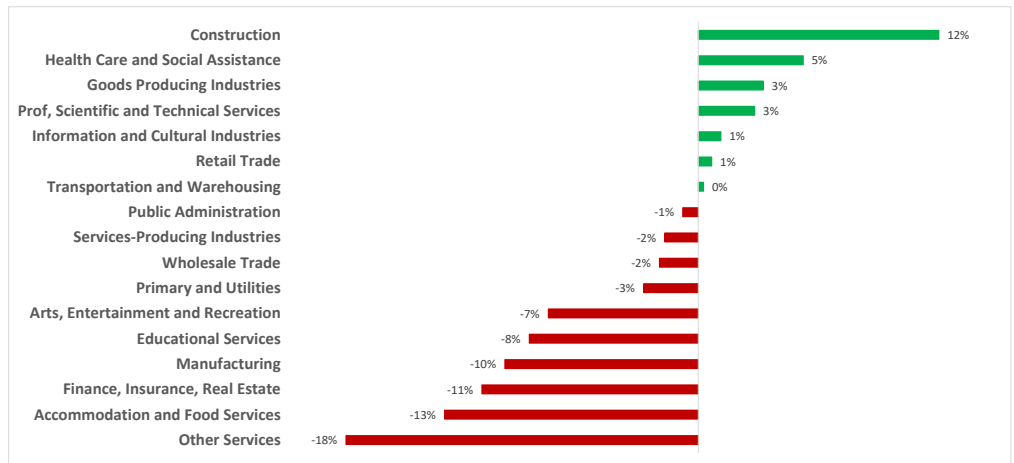
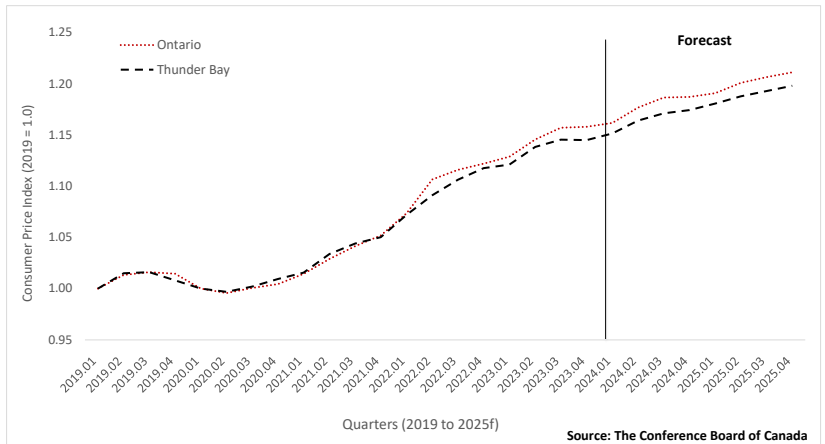


Figure 2 – Expected shifts in employment by sector (2023 to 2024f)



## Recent inflation rates concerning, expected to cool but remain elevated

Figure 3 - CPI across Ontario and Thunder Bay (2019 = 1.0)



- ✓ The Consumer Price Index (CPI) tries to capture price changes experienced by consumers in a given geographic area. It measures price changes by comparing, over time, the cost of a fixed basket of goods and services across eight significant components.
- ✓ Thunder Bay has experienced slightly fewer price increases than the Province since 2019, with most of the recent increases in 2021, 2022, and 2023.
- ✓ In the future, price increases are expected to cool but remain above historical averages in 2024 and 2025.