



Post Pandemic Planning Scenarios

Elgin Middlesex Oxford Workforce Planning and Development Board

December 2020

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Project Overview

This document is intended to broaden and deepen conversations about next steps in addressing the present and future economic and social impacts of the COVID-19 pandemic in the **London Economic Region (Elgin, Middlesex and Oxford counties together)**. It provides:

- (1) An overview of **the recovery timeline**, describing four stages of recovery that are the basis for how the economy, individual sectors, and individual businesses progressed and will progress through the crisis.
- (2) A summary of **the past**, describing issues since the start of the pandemic. Some of the past might be irrelevant for predicting the future, but it plays an important role in explaining the speed of recovery.
- (3) An overview of **the present**, describing the impacts that have already been felt, impacts we can anticipate, initiatives that have already been launched, and other ideas for potential actions that are being explored in the region.
- (4) An overview of **the future**, describing a set of preliminary socio-economic scenarios that have been developed by **Elgin Middlesex Oxford Workforce Committee and its community stakeholders**.
- (5) **Recommendations** and the preliminary design of potential labour market and workforce initiatives up to June 2022.

Using this current status overview and this set of preliminary future scenarios, **Elgin Middlesex Oxford Workforce Committee** members, businesses, and community leaders may continue discussions to identify initiatives that can be put in place today, and in future scenarios.

The members/partners of the Elgin Middlesex Oxford Workforce Committee are listed in Appendix 1.

The next step in developing strategic plans will be to elaborate the scenarios and their indicators further to account for impacts on specific industries, and then to identify scenario-based recommendations for action to overcome the challenges and identify opportunities that each of these scenarios could present to our community.

Scenario-based planning timeline

Scenario planning is a favoured method by economists, economic developers and business professionals for strategic planning under uncertain times, when significant socio-economic disruptions make the past data irrelevant for future forecasting. The worldwide impact of COVID-19 pandemic generated a sudden and unexpected socio-economic disruption imposing new social arrangements affecting peoples' behavior regarding traveling, working, living, and relaxing, which made most of the past data irrelevant for planning. There are numerous advantages derived from using this method among which are the holistic and collaborative aspects of the method.

Therefore, the scenario-based planning was adopted for laying out a local economic recovery plan.

The scenario planning method requires several steps throughout its completion. These steps are:

1. Identify key factors

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2. Identify critical uncertainties and scenario matrix
3. Build out scenarios and action plans with stakeholders
4. Revise and validate scenarios and action plans
5. Publish and incorporate into Economic Recovery Plan
6. Track scenario indicators and continuously adapt the plan

The steps will be detailed in the next sections of the present document. The time horizon considered for the current scenario-planning is 2020-2022.

During August-September of 2020, throughout several internal discussion sessions, the Elgin Middlesex and Oxford Workforce Planning and Development Board (EMO WPDB) has developed a list of key factors influencing the economic recovery following the start of the pandemic, officially set for March 11, 2020. The EMO WPDB presented this list (see Appendix 2) for validation to the local Scenario Planning Steering Committee and Windsor Workforce Planning Board, the lead of the Scenario Planning Project for the South Western Ontario. During September-October of 2020, in consultation with the Scenario Planning Steering Committee, the list of key factors has been refined and reduced to two critical uncertainties that will govern the economic recovery in the London Economic Region (ER). These uncertainties were: 1) the pandemic resolution and 2) the public support. The two critical uncertainties for the future recovery of the local economy were utilized as the axes that define the four potential local economic scenarios, which are presented in detail in the next sections of this document. During October-November of 2020, the four scenarios were presented for consultation-validation to five member groups of the Elgin Middlesex and Oxford Workforce Committee (EMOWC) (see Appendix 1). During these consultations - conversations the members of the EMOWC revised the scenarios and provided suggestions for recovery actions appropriate to each scenario, as well as their anticipation of certainty and impact of each scenario. The summary of these actions will be provided in the next sections of the current document. The scenarios and potential economic recovery actions will be also incorporated into the Local Economic Recovery Plan. Finally, a [Google Data Studio Scenario Planning Dashboard has been developed for the London Economic Region](https://datastudio.google.com/s/IF6wfEOcqFw) presenting briefly the scenarios and the lead indicators for each scenario axis as well as for the local labour market: (<https://datastudio.google.com/s/IF6wfEOcqFw>).

The dashboard will help local economic development offices, researchers, analysts, other professionals and the public identify the potential economic scenario where the local economy is heading in the near time horizon (6-9 months). However, depending on the environmental changes (particularly the changes of the conditions for the two scenario axes), the recovery scenario can shift towards one or another.

RECOVERY TIMELINE

Economic recovery, for our region and for individual sectors or businesses, can be divided into four stages: REACT, RESTART, RECOVER, and RESILIENCY (Figure 1). They are defined as follow:

- **REACT:** Adjusting to lockdown conditions and new restrictions, accessing remedies, taking short-term and reactive actions. Priority is staying afloat.

- **RESTART:** Adjusting to new, more stable conditions that permit a certain level of business activity, while still relying on temporary remedies and preparing for potentially serious threats including new lockdowns. Priority is reaching a new steady state.
- **RECOVER:** A new steady state, or new normal, is sustainably achieved. Depending on the sector, this may represent a return to pre-COVID-19 levels of activity. Businesses may still be dealing with the impacts of downturn in other sectors or in the economy. Priority is long-term investments and changes to business model that enable success in the new normal.
- **RESILIENCY:** The benefits of investments and long-term changes made in the recover phase are felt. Whether as a result of these changes, or the end of the COVID-19 crisis, businesses become impervious to negative impact related to COVID-19. Priority is growth beyond the COVID-19 crisis.

Through the consultations-conversations with the **EMOWC** members, the EMO WPDB has identified and discussed the REACT and RESTART phases, which are summarized in Figure 1. While we continue to identify immediate challenges to overcome and opportunities to seize, the next step in developing a recovery plan is to begin planning for RECOVER and RESILIENCY phases, which could span from today to 3+ years into the future. Continued uncertainty about the progression of the COVID-19 pandemic as well as its long-term impacts on the global economy mean that a scenario-based approach is required to plan proactively for these stages of recovery.

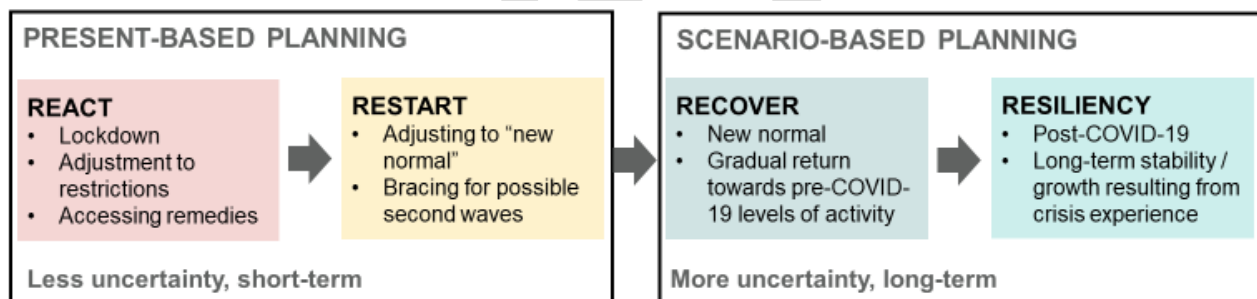


Figure 1

Not every sector progressed or will progress through these stages at the same rate. As of **November 2020**, some may still be transitioning from REACT to RESTART, while others are entering the RECOVER stage or continuing to remain RESILIENT. Below is a timeline analysis of how key sectors in the **London ER** have progressed through the crisis to date, based on our knowledge from discussions with local industry stakeholders and analysis of data from Labour Force Survey collected by Statistics Canada.

Figures 2 and 3 below show employment progression throughout the 2020 in the London ER in the *goods producing* and *services producing* sectors of the local economy. It is remarkable to observe at this aggregated level that the employment in the *goods producing* sector, including Agriculture, Manufacturing and Construction subsectors, has diminished between March and June of 2020, part of the REACT stage. Next, between July and November of 2020, employment in the *goods producing* sector bounced back almost at the same levels prior to the COVID-19 pandemic, part of the RESTART and RECOVER stages (see Figure 2). Not the same story was unfolding for the employment in the *services producing* subsectors,

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as illustrated in Figure 3. While the employment in the *services producing* sector dropped between March and June of 2020, part of the REACT phase, it slightly grew (RESTART) and partially RECOVERED between July and September of 2020; to REACT again in October-November 2020 the second wave of COVID-19 spread.

These images suggest that although not immune to the impact of the virus, the *good producing* sector provides working conditions that limits the risk of exposure to the Corona virus (good space between machinery, assembly line work stations, outside work, etc. - see Allen (May 19, 2020)), whereas in the *services producing* sector workers are exposed to higher risks of contracting the virus. Consequently, the *services producing* sector had recovered at a slower pace and remained sensitive to changes associated with the pandemic.

Employment in *Agriculture* in the London ER had a light drop between April and May of 2020 (REACT) followed by a slight growth (RESTART) in June of 2020 and continued for the rest of 2020 at higher levels than pre-pandemic showing significant RESILIENCY, see Figures 4 and 10. The traveling and immigration restrictions created significant issues associated with temporary workers in *Agriculture*, locally and elsewhere in Canada. The COVID-19 pandemic increased the pool of available talent locally, and thus, farmers and other operators hired more locally although with significant limitations some migrant workers have been accepted to work temporary in *Agriculture*. *Agriculture* is one of the few sectors in the London Economic Region that provided increased opportunities for employment during 2020.



Figure 2

Source: Statistics Canada, Table 14-10-0091-01

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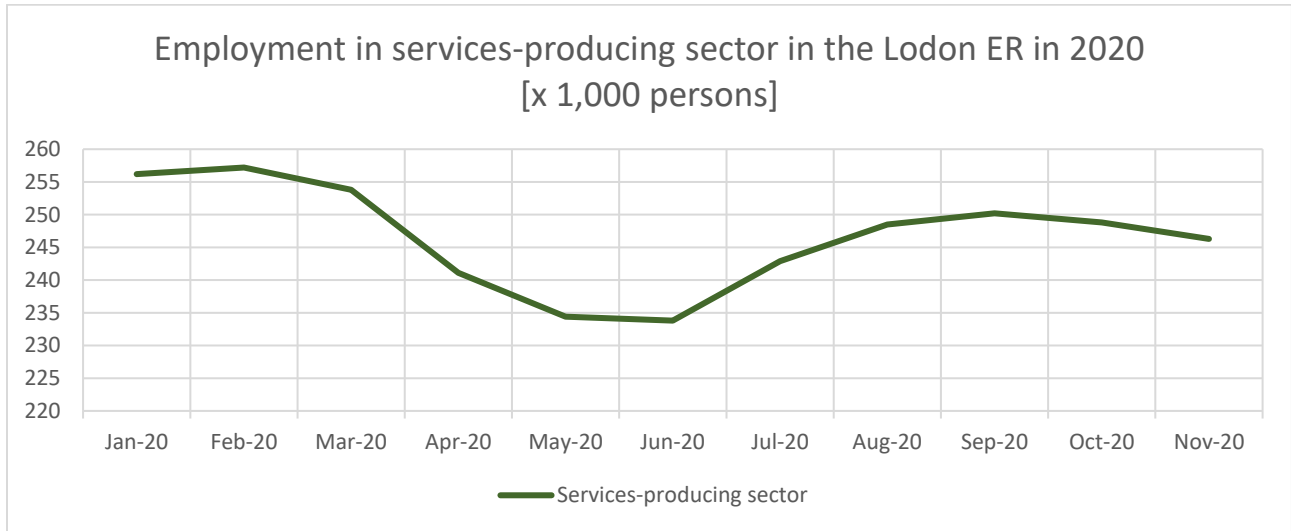


Figure 3

Source: Statistics Canada, Table 14-10-0091-01

Although at a slower pace, the employment in the local *Construction* industry followed a similar pattern as employment in *Agriculture*, see Figures 5 and 10. Conversations with *Construction* workers revealed that their work almost never stopped during 2020. On top of the existing contracts, new home improvement projects have been piling up for local *Construction* firms since local money otherwise spent on vacation and travelling were diverted towards such focus. The relative medium risk of exposure to COVID-19 associated to the *Construction* occupations combined with the extra demand for home improvement projects made this industry perform at higher levels of employment than pre COVID. As *Agriculture*, the *Construction* subsector partially absorbed some of the unemployment generated by the pandemic in other areas of the economy.

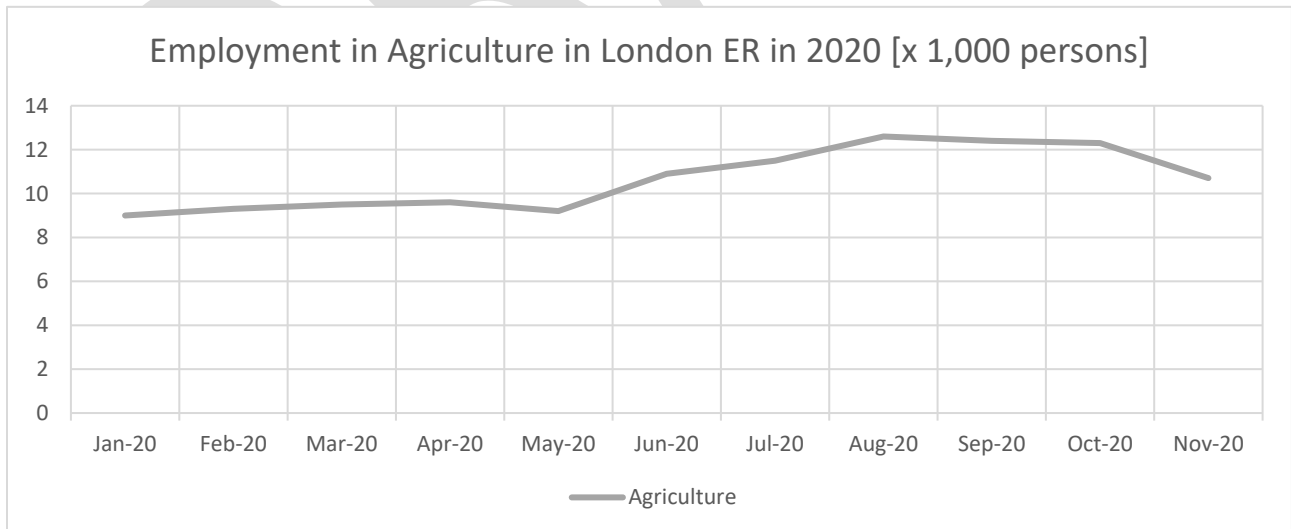


Figure 4

Source: Statistics Canada, Table 14-10-0091-01

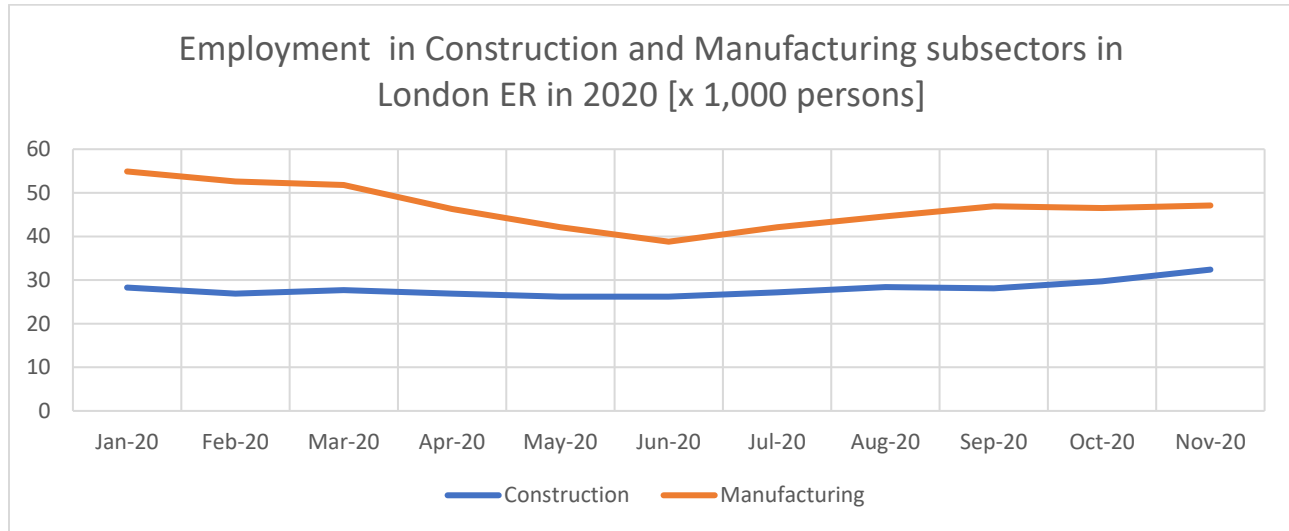


Figure 5

Source: Statistics Canada, Table 14-10-0091-01

Manufacturing in the London ER suffered a loss of employment between March and June of 2020 (Figures 5 and 10) after which it followed the RESTART-RECOVERY between June and September. Between September and November of 2020, the employment in *Manufacturing* flattened somewhat, maintaining the RECOVERY course at employment levels slightly lower than pre pandemic. As briefly touched earlier, risk of exposure to COVID-19 virus is medium for manufacturing jobs. In general, the fabrication processes and machinery-equipment layouts allow physical distancing among employees. This coupled with good shift planning, and lack of contact with customers permit organization of safe working environments compared to other sectors. The sector has been also revitalized by the local manufacturing of Personal Protective Equipment (PPE), Food Manufacturing (particularly the products considered essentials), the Metal, Wood, Leather Plastic and Rubber Manufacturing for the *Construction* subsector, and other.

The *Wholesale and Retail Trade* has been one of the most impacted sectors by the pandemic due to the high risk of exposure to COVID-19. Face-to-face encounters with customers and clients increase the risk of contamination with the virus. The April-May lockdown and the progressive opening of the local economy generated numerous business closures in this subsector. The employment in the subsector is illustrated in Figures 6 and 10, which show that the employment in *Wholesale and Retail Trade* dropped dramatically between March and June in REACTION to the pandemic lockdown and restrictions. The subsector attempted a RESTART in July, but unfortunately the change in consumer behavior in favor of online shopping and against the in-store shopping generated further business losses and closures. These conditions limited personnel recall for work, which is reflected in the downward trend in employment after August 2020. Grocery retail stores, which were declared essential businesses, home improvement retail stores, and wholesale stores adapted quickly to the new safety rules and functioned continuously since the pandemic started. However, all the retailers and wholesalers had to fast adapt to the changes in consumer behaviour favouring online shopping. Therefore, they had to supplement quickly their physical presence with a virtual presence. The larger retailers had been better prepared for this change, having

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already the virtual infrastructure ready for online shopping. Unfortunately, many small retailers have been surprised and not ready for this sudden change, and thus some have lost their business during this struggle. Curb delivery and home delivery have been changes in this sector complementing the online business. Home delivery require either subcontracting reliable drivers or investing in the own car fleet and drivers. Again, large retailers had been better prepared than medium and small ones for this change in business. However, these somewhat novel transformation of the *Wholesale and Retail Trade* subsector was not enough to absorb the massive layoffs generated by the lockdown and scare of the COVID-19 spread.

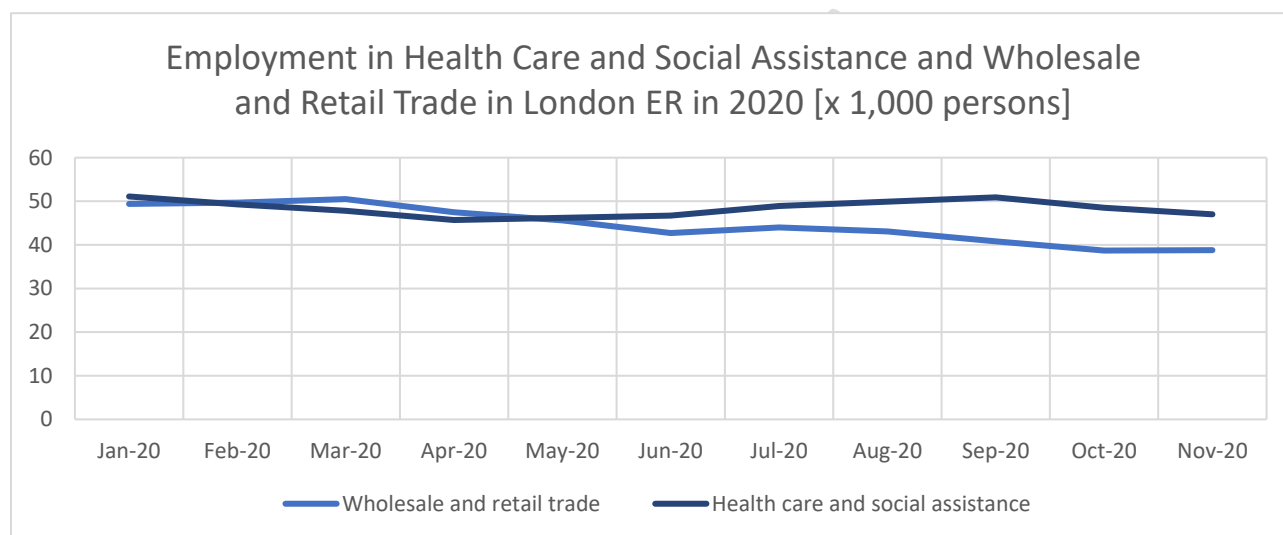


Figure 6

Source: Statistics Canada, Table 14-10-0091-01

Employment in the local *Health Care and Social Assistance* subsector didn't expand as much as foreseen by economic development experts, researchers and analysts. This proves the fact that this subsector is highly regulated, and employment cannot vary easily unless the excess of certified talent is available. Also, London ER has not been one with intense spread of COVID-19. The number of infections has been under relative control due to the first lockdown and the safety precautions imposed by provincial and local governments as well by businesses. The sector REACTED in the months following the start of the pandemic by reducing somewhat the employment (March and April of 2020), to RESTART in May of 2020 – showing signs of increased hiring, and to RECOVER between June and September of 2020 – getting employment at pre COVID levels (Figures 6 and 10). Unfortunately, in October and November the employment in this sector displayed a downward trend again as a REACTION to the second wave of COVID-19 infections. The sector didn't absorb much of the increased pool of unemployed generated by the pandemic.

The employment in the *Educational Services* sector has been very RESILIENT to the pandemic. Between January and June of 2020, the local employment in the sector increased showing some RESILIENCY to the spread of the virus (see Figures 7 and 10). The REACT phase of the sector showed up in July - September when the employment in the local subsector reduced significantly to continue the RESTART-RECOVERY in October and November and the levels below pre COVID. This pattern can be explained by the cycles of the academic year, the pandemic arrived during the second part of the 2019-2020

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academic year, during the winter-spring semester. Teachers continued their work under the new circumstances, mostly teaching online, fulfilling their contracts for the academic year. Once the summer hit, the part-time teachers haven't found the same employment opportunities as in 2019, some losing their jobs. Due to the travel restrictions and pandemic fear, some students postponed their studies. These disruptions are reflected in the reduced demand for educational services beginning with September and the new academic year 2020-2021. This subsector had the most adaptable workforce to the changes towards offering educational services online. Most of the educational institutions had the infrastructure ready for engaging in the new way of teaching. With a few tweaks, most of the educational institutions were ready to provide their services online.

Somewhat surprising was the path followed by employment in the *Professional, Scientific and Technical Services* subsector (see Figures 7 and 10). After the REACT between March and May of 2020, reducing employment in the sector, a quick RESTART happened in June of 2020 to lay the path for a healthy RECOVERY in July. For the rest of the year the employment in this subsector reached levels above the pre pandemic, indicating RESILIENCY and REACTION to the second wave of COVID-19 infections in October and November, showing reductions in employment accordingly. This sector provided locally a good buffer for the professionals, scientists and trades people that lost their work during the pandemic. Online consulting and research provided a viable alternative for the experts in the field affected by the restructuring imposed by the post pandemic economy. The trades people that lost their jobs had the chance to open businesses or continue practice as self-employed migrating to the *Construction* or *Agriculture* sectors which were charging at full speed.

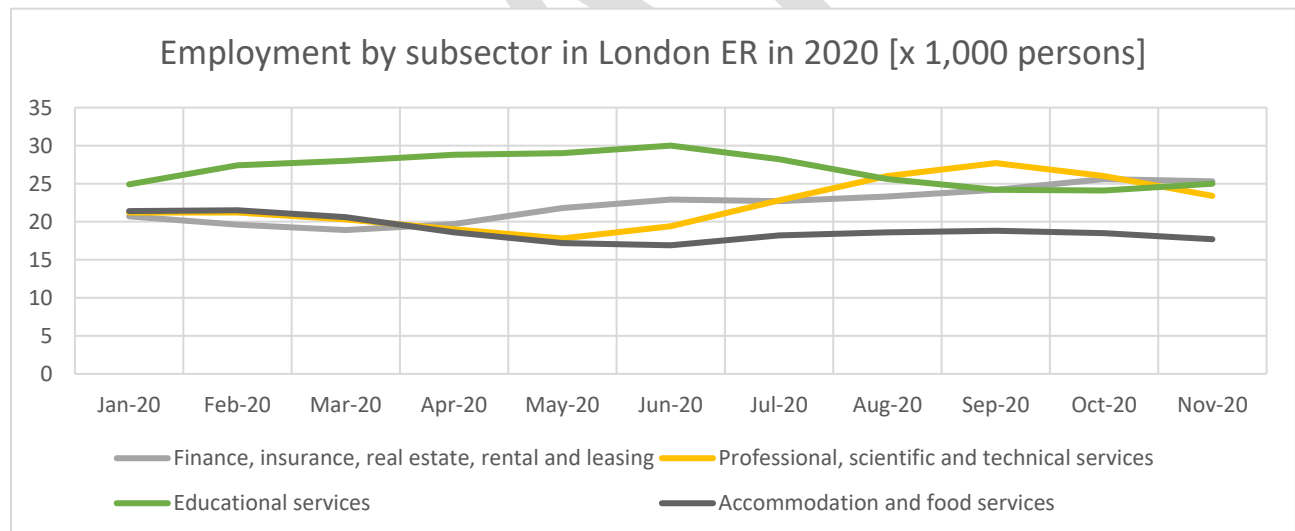


Figure 7

Source: Statistics Canada, Table 14-10-0091-01

A positive surprise was provided by the *Finance, Insurance, Real Estate, Rental and Leasing*. The employment in this sector proved to be RESILIENT to the circumstances created by the COVID pandemic (see Figures 7 and 10). The *Financial* subsector has been preparing for a while for transitioning toward online services and gaining efficiencies. The COVID-19 pandemic just accelerated this trend. However, the sector had the infrastructure (the hardware, networks and software) necessary for servicing clients

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and customers remotely. The sector has absorbed some of the local unemployment generated by the COVID-19 pandemic. Professionals from other sectors (accountants, financial professionals, IT professionals, etc.) had available work opportunities in this sector.

The *Accommodation and Food Services* subsector was dramatically affected by the COVID-19 pandemic. The travel restrictions and social distancing measures have been cutting severely the demand for these services overall. Consequently, numerous such businesses have been opting to exiting the subsector, while others have been reducing significantly their personnel. Figures 7 and 10 show that the subsector reacted immediately after the beginning of the pandemic in March, diminishing its employment between March and June of 2020 (REACT). In July of 2020, the *Accommodation and Food Services* subsector increased slightly its employment indicating a RESTART. Between August and November, the employment in the subsector followed a slow path for RECOVERY, operating at levels of employment significantly lower than pre pandemic. Restaurants and other food services entities had a difficult time to restore customers' pre-COVID behavior and restore confidence that it's safe to eat out. The efforts invested in insuring safe social distancing proved insufficient to generate enough demand for many such businesses. The franchise businesses have been fortunate to receive support from their franchisors. However, many independent operators have been forced out of business under the conditions created by the pandemic.

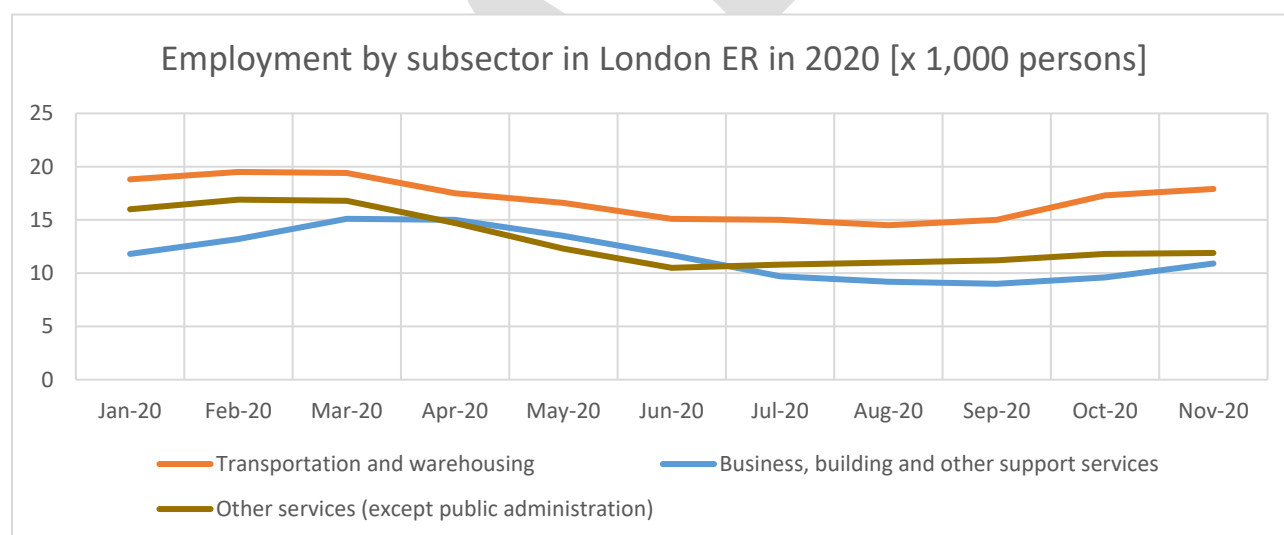


Figure 8

Source: Statistics Canada, Table 14-10-0091-01

Figures 8 and 10 show that employment in *Transportation and Warehousing* subsector suffered a continuous decline (REACT phase) between March and August of 2020 followed by a quick RESTART in September of 2020, just to entry the RECOVERY phase in October. Traveling limitations and reduced demand for products in general during the lockdown phase impacted numerous transportation and warehousing businesses. The limited air traveling, the constrained options for social distancing within public means of transportation, and the increased reliance on personal transportation generated reduced the demand for transportation and warehousing services overall. As public became accustomed more with online shopping (second part of 2020), the demand for transportation and warehousing services

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started to pick up. However, the growth in demand for such services during September - November of 2020 didn't leveled back to the demand during pre-COVID times. Major victims in the post pandemic period have been air transportation, cruises, small-medium size travel agencies, and small – medium size transportation operators which relied mostly on short-term and temporary contracts.

Employment in *Business, Building and Other Support Services* maintained RESILIENT during March-April of 2020 after which it has dropped continuously until September (REACT phase) followed by a brief RESTART in October of 2020. The RECOVER phase started in November of 2020 showing a light growth in employment in the subsector, see Figures 8 and 10. The subsector represents management companies and business support firms, such as call centres, collection agencies, document preparation, janitorial services, landscaping and other. As businesses started to lose revenue due to the COVID-19 and many closed their activity, the demand for business services diminished. Also, as numerous businesses closed temporary their operations, or functioned at reduced capacity, the demand for waste management and remediation services has also reduced. However, most of the subsector has been equipped for the remote work and teleworking imposed by COVID-19, being able to absorb some of the surplus of unemployed professionals generated by COVID-19 pandemic in 2021. As businesses adapt faster to the new economy, the demand for business, building, and support services will increase and generate more demand for workers in this subsector.

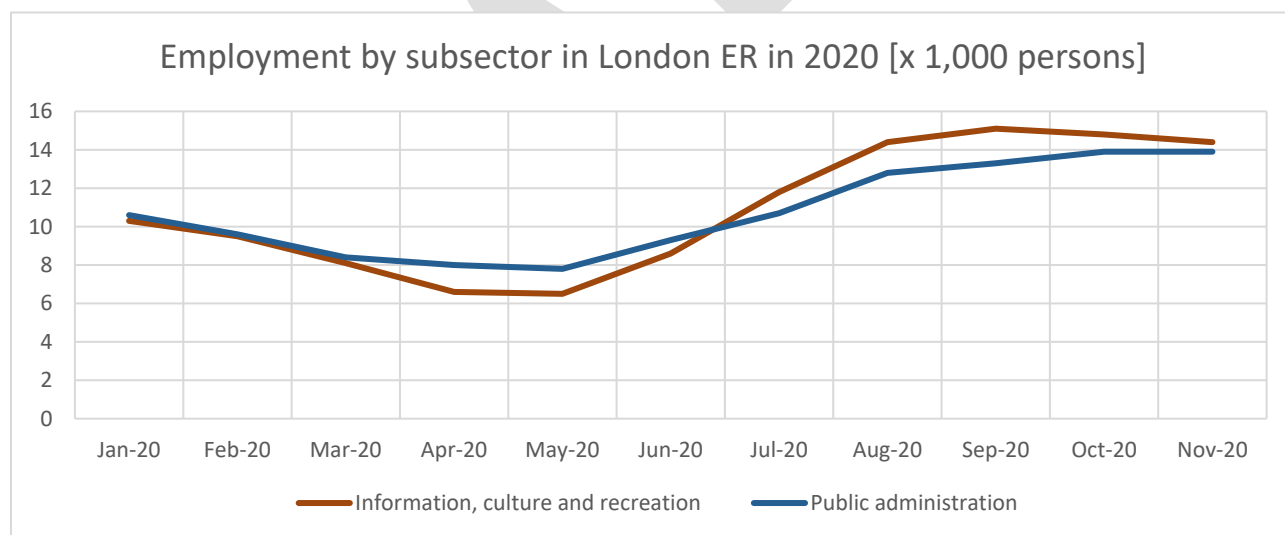


Figure 9

Source: Statistics Canada, Table 14-10-0091-01

Between March and June of 2020, the employment in *Other Services (except Public Administration)* subsector suffered a major drop, part of the REACT phase (see Figures 9 and 10). In July of 2020 the subsector had a RESTART showing a soft increase in employment continuing from August until November of 2020 with a RECOVERY. In November of 2020, the employment in this subsector was still below the pre pandemic levels. Business establishments in this sector are primarily engaged in activities such as equipment and machinery repairing, promoting or administering religious activities, grant making, advocacy, and providing dry cleaning and laundry services, personal care services, death care services,

pet care services, photofinishing services, temporary parking services, and dating services. Therefore, the subsector proved to be very sensitive to the social distancing and reduced business activity created in the months immediately following the start of the pandemic. As household trust improved and businesses reopened to full operations during the summer of 2020, the demand for other services improved as reflected in the growth in employment after July of 2020.

Employment in *Information, Culture and Recreation* subsector display a major drop between March and May of 2020 as a REACTION to the COVID pandemic followed by a RESTART in June of 2020, see Figures 8 and 9. The RECOVERY happened in July of 2020 followed by RESILIENCE in August – September of 2020 with levels of employment higher than pre pandemic. In October -November of 2020 the employment in the industry started to drop due to the second wave of COVID spread, fatigue and some sense of hopelessness. In aggregate this subsector is composed of businesses and organizations operating in a) *Information and Cultural Services* group of industries and b) *Arts, Entertainment and Recreation* group of industries.

The businesses and organizations performing in Information and Cultural Services have as object of activity telecommunications, radio, television, theatre, books, magazines, newspapers, videogames, Internet access and other related services. This branch of industries has been less negatively impacted by the COVID-19 pandemic. Immediately after the pandemic hit, the local demand for the Internet services, higher upload and download capacity and increased quality of communication has spiked to the roof. The same happened with the need for news and public information about events happening as well as video gaming considering that all other traditional entertainment activities have been limited by the pandemic.

On the other hand, the businesses performing in the *Arts, Entertainment and Recreation* group of industries have as object of activity performing arts (music, dance, theatre, etc.), independent artists, museums, zoos, parks and recreation, casinos and lotteries, sports related activities, fitness, sky resorts, etc. The firms and organizations within this group have been impacted negatively by COVID-19 pandemic, mostly due to the social distancing and the lock down restrictions.

It is assumed here that the wonderful RESTART - RECOVERY of the subsector is owed to the *Cultural Services* and most likely due to the companies providing Internet services, video gaming, telecommunications and news, which will continue to be a driver in the new economy driven by remote working, knowledge, social distancing, online shopping, etc.

The last subsector in this analysis, the *Public Administration*, followed a close pattern to the *Information, Culture and Recreation* (see Figures 9 and 10). The employment in the *Public Administration* diminished between March and May of 2020 as a REACT to the social distancing and lockdown measures imposed by the COVID-19 pandemic. In June of 2020 the employment in the subsector displayed a slight growth signaling the RESTART, while in July of 2020 the sector suffered a complete RECOVERY achieving the pre pandemic levels of employment. Next, between August and November of 2020 the employment in the sector grew steadily at levels surpassing the pre pandemic. Several explanations can be associated with this evolution. The first and most probable explanation is that the pattern of employment in the subsector can be associated with the fiscal year cycles (April current year – March next year). Numerous jobs in *Public Administration* are contract positions that end with the end of the fiscal year. The COVID-19 pandemic hit exactly at the end of the fiscal year, consequently the lockdown that followed in April-May reflects the uncertainties and the disruption of previous programs of interest retargeting to focus of the governments to the pandemic and the economic recovery. Therefore, the growth of the employment in the subsector beyond the pre pandemic levels reflects the amount of economic stimulus that the

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governments at various levels have been directing towards recovery the economy. The sector absorbed some of the unemployment generated by COVID-19 pandemic in other areas of the economy. The demand for professionals capable to administer public help for unemployed or businesses in trouble increased accordingly as the post pandemic events unfolded. Otherwise the sector has been prepared to operate partially with remote workers. However, the services requiring face-to-face encounters with clients have been more exposed to contamination by COVID-19. Quick innovation in Personal Protection Equipment (PPE) allowed the services to quickly adapt toward maintaining safety while providing the needed services during this period.

Economic subsector	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
Agriculture	Resiliency	Resiliency	React	Restart	Resiliency	Resiliency	Resiliency	Resiliency	Resiliency
Construction	React	React	React	Restart	Recover	Recover	Resiliency	Resiliency	Resiliency
Manufacturing	React	React	React	React	Restart	Recover	Recover	Recover	Recover
Wholesale and retail trade	React	React	React	React	Restart	React	React	React	React
Transportation and warehousing	React	React	React	React	React	React	Restart	Recover	Recover
Finance, insurance, real estate, rental and leasing	React	Restart	Recover	Resiliency	Resiliency	Resiliency	Resiliency	Resiliency	Resiliency
Professional, scientific and technical services	React	React	Restart	Recover	Resiliency	Resiliency	Resiliency	React	React
Business, building and other support services	Resiliency	Resiliency	React	React	React	React	React	Restart	Recover
Educational services	Resiliency	Resiliency	Resiliency	Resiliency	React	React	React	React	Restart
Health care and social assistance	React	React	Restart	Recover	Recover	Recover	Recover	React	React
Information, culture and recreation	React	React	React	Restart	Recover	Resiliency	Resiliency	React	React
Accommodation and food services	React	React	React	React	Restart	Recover	Recover	Recover	Recover
Other services (except public administration)	React	React	React	React	React	Restart	Recover	Recover	Recover
Public administration	React	React	React	Restart	Recover	Resiliency	Resiliency	Resiliency	Resiliency
	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20

Figure 10

THE PAST: The historical context of how far we have come

Impacts we have already felt

In the immediate months following the COVID-19 pandemic start (March), the employment in the London Economic Region has dropped progressively until June of 2020 when employment was about 11% lower than in January 2020. Once the economy progressively open (June), the employment in the region started to recover, ending in November about 3.3% lower than in January 2020, (see Figure 11). This path for recovery demonstrates that government support at all levels and the local initiatives have been effective for the quick return to normalcy.

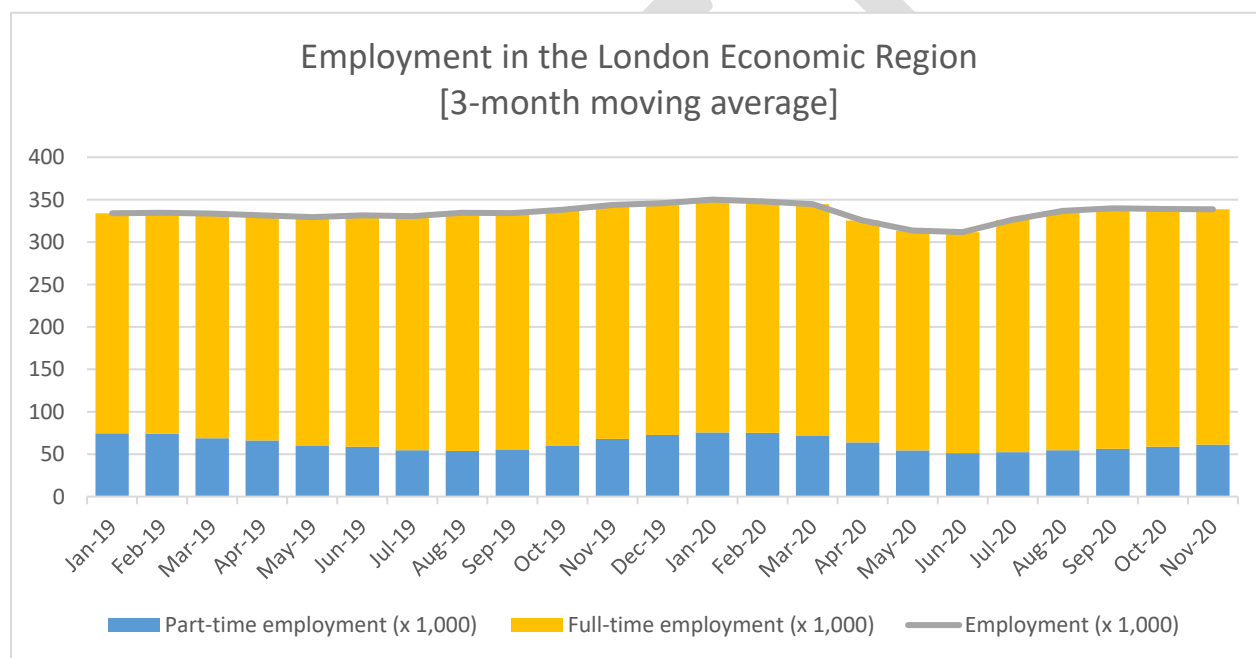


Figure 11

Source: Statistics Canada, Table 14-10-0293-01

Looking at the other side of the labour market, the unemployment more than doubled between January and June 2020 (174% higher in June than in January 2020), see Figure 12. Between July and November, the unemployment has dropped significantly, specifically in November the unemployment has been 83% higher than in January 2020. This side of the story shows that although progress has been achieved during the short recovery period (July – November), there still are many who were separated from and couldn't reconnect back with their former employers.

Retrospectively, the local news headlines (Job Bank Canada, n.d.) started with Canada Life letting go a few employees in March followed by two rounds of layoffs (April and May) by the City of London, one of the largest employers in London ER, which involved mostly temporary, seasonal, and casual employment. The trend continued with the announcement of High Park Company laying off some people

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at its cannabis processing plant, in May, while in June, Marriott International announced closing the St. Thomas' Starwood calling centre in September.

In September, the local headlines were mentioning Bank of Montreal closing a branch in Delhi, Ontario. During the same month, several restaurants announced closing: Corey's in Tillsonburg and Gardenia in Strathroy.

In November, Frank and Gus Pizza publicized closing, as well as GKN Sinter Metals in St. Thomas, Stryker Medical London and Call the Office in London. The closures announced have been from Manufacturing, Public Administration, Accommodation and Food Services, Finance, Insurance, Real Estate, Rental and Leasing, Information, Culture and Recreation, and Business, Building and Support Services. Although this review of business closings is very limited, it provides a taste of the unfolding trend laid by the Corona virus pandemic.



Figure 12

Source: Statistics Canada, Table 14-10-0293-01

On the other hand, businesses have been opening or expanding their operations in the London Economic Region (ER). The local news headlines (Job Bank Canada, n.d.) in March counts that construction has commenced at the four towers in London and a new cannabis shop, Friendly Stranger, opened in London.

In April, Trudell Medical announced expanding their operations and hiring people, Dr. Oetker and Arva Flour Mill announced the same. Go Fog It, a cleaning company opened its operations in London during the same month.

In May, the Middlesex Paramedic services received funding to expand their business. Several restaurants opened in London during May: EL Poco Lobo, ChickPz and Zaatarz Bakery. Also, in May, Digital Extremes announced hiring more people for their video game operations.

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In July, Victoria Hospital in London announced hiring people, while NP Aerospace manufacturing announced braking ground for their business in London. Finally, also in July, Aspire Food Group broadcasted their intentions of manufacturing food in London starting with August.

In August, FedDev Ontario announced funding Forge Hydrocarbons and IGPC Ethanol Inc. in London to expand their business in renewable fuels. Construction of a new fire station in Port Stanley began in August 2020.

In September, ANVO Pharma Group broke ground on a new pharmaceutical manufacturing plant in London, Oxford Pallet received provincial funding to expand their operations in Norwich, and Element 5Co was expected to begin their operations in St. Thomas.

In October, Omni Jewelcrafters opened at the Elgin Centre in St. Thomas, Carfax Canada ULC announced expanding their headquarters in London, Factory Bucket Inc., Oxford Pallets and Titan Trailers publicized receiving federal funds to expand their businesses.

In November, the Backroads Café and Tavern opened while Fanshawe College received federal funding to invest in its Innovation Village.

The count of business events in the London ER is not comprehensive, but suggestive enough to show the impact of COVID-19 as well as the local economic recovery efforts unfolded since the beginning of the pandemic. Business creation and expansion continued during these unprecedented difficult times.

Figure 13 illustrates the high number of business closings in the London CMA during the lockdown and in the following months, April – June 2020, and the recovery afterwards. In contrast, during March-May of 2020, the number of business openings has been significantly lower than the number of business closings, but it grew surpassing the number of closings afterward, on the road of recovery. This dynamic expresses the local economic struggle in keeping the economy afloat.

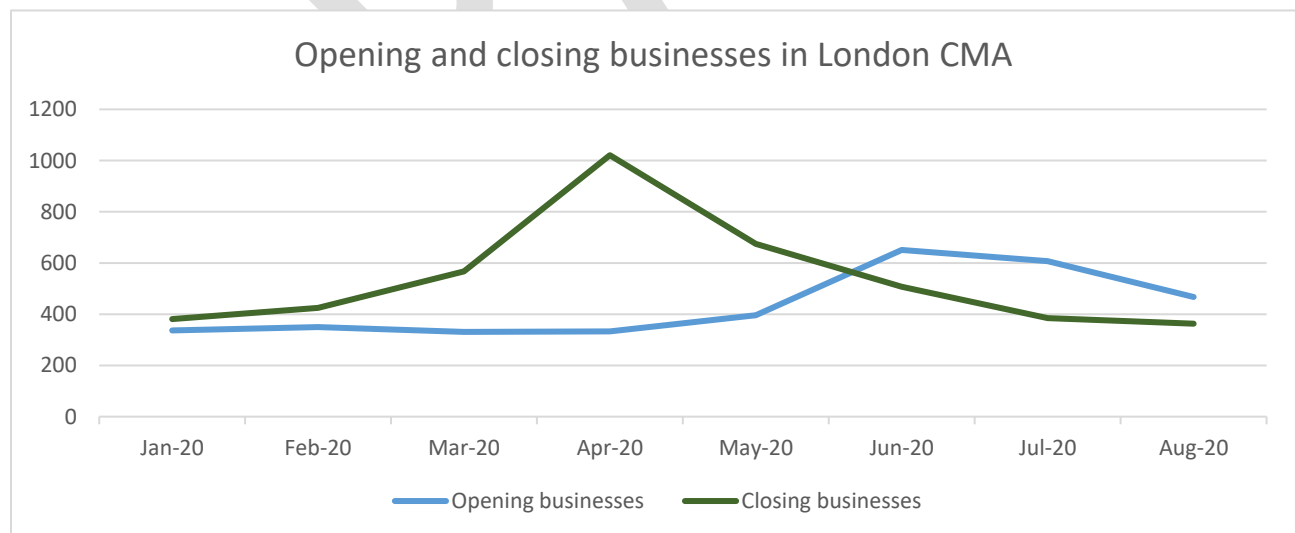


Figure 13

Source: Statistics Canada, Table 33-10-0270-01

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Since May 2020, the federal and provincial governments have been deploying economic stimulus to support the individuals, businesses, sectors and industries in trouble (Government of Canada, 2020, December 10). The Canadian Emergency Response Benefit (CERB) and Employment Insurance (EI) played a huge role in helping those that lost their jobs during the months following the CORONA virus pandemic. Also, the mortgage payment deferral measures helped those who faced hardship during the pandemic. Canada Recovery Sickness Benefit (CRSB) and Canada Recovery Childcare Benefit (CRCB) played an important role in sustaining those who suffered sickness or had trouble providing childcare. Helping various groups of population (Indigenous, students, persons with disability, and seniors) experiencing hardship during the pandemic was also in the view of the governments during 2020.

On the other hand, the stimulus targeting businesses has been directed in four major areas: 1) reducing layoffs, rehiring and job creation; 2) taxes and tariffs; 3) financial support, loans and accessing credit; and 4) targeted support for various groups of businesses based on ownership (minorities, self-employed, and other). Canada Emergency Wage Subsidy (CEWS), work-sharing programs, extension of layoff programs, and creation of job opportunities for youth have been major employment stimulus programs advanced to support businesses navigating through the pandemic times. Waving tariffs for certain medical goods and postponing tax payments for a while were stimulus measures designed to help businesses survive during the Corona virus pandemic.

Canada Emergency Business Account (CEBA) interest-free loans, Canada Emergency Rent Subsidy (CERS), loan guarantee and co-lending programs for small and medium size businesses, Regional Relief and Recovery Fund (RRRF), and other targeted financial programs based on business size have been helping local businesses pass the hardship due to or survive then pandemic.

Directing financial support towards most affected industries such as Agriculture, Accommodation and Food Services, Tourism, Retail and Wholesale, Manufacturing, Information, Culture and Recreation, Education, Health Care helped many establishments within these industries.

Canada's COVID-19 Economic Response Plan (Government of Canada, 2020, December 10) describes in detail all these federal supports.

At the provincial level, economic stimulus has been committed also to support the restart-recovery of local and regional economies in Ontario (Government of Ontario, 2020, March). According to the document \$3.3 billion has been committed to health care to be ready available to respond to the COVID-19 cases, \$3.7 billion has been directed to support people and jobs helping mostly those economically at risk (seniors, students, Indigenous, etc.) with various financial obligations such as energy bills, property taxes, educational taxes, etc., and \$10 billion oriented for helping people and business with the cash-flow, reducing or postponing business payment.

The local news headlines were picking here and there local initiatives designed to help with the recovery (London Economic Development Corporation, n.d.).

In May 2020, e.g.local employers were invited to participate at the virtual London and Area Works Job Fair. During the same month Libro was giving out \$17,500 to its employees in incentives for “buying local.”

In June 2020, Downtown London business association has launched two programs to assist financially its members: The Restart Grant and The Marketing Grant.

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In July 2020, Exar Studios in London received funding from Regional Recovery Relief Fund to develop a virtual app Engage that will augment reality for tourists and the large public interested in discovering London and its history. Also, in July, TechAlliance launched a new online tool (The (Rebuild) Roster) to put tech talent in front of hiring managers in Southwestern Ontario tech companies.

In August 2020, McCormick Canada took the initiative to raise money for a support fund that offered up to \$1,000 in financial grants to local bars and restaurants impacted by COVID-19 pandemic to reopen and recover. During the same month the City of London launched Construction Dollar Program to support core-area businesses through customer giveaways, contests, and promotions during the summer. Londoners visiting downtown and Old East part of the city received coupons to be used at participating businesses. Further in August, the City of London in collaboration with Fanshawe College launched a pilot project looking to train people for jobs and help them stay working. Also, in August, TechAlliance connected to ORION's network enabling innovation through advanced digital infrastructure. Further, TechAlliance has launched its Future Proof Program. The Program support businesses with new tools and talent needed to transition to online retail and use digital marketing strategies.

In September 2020, Fanshawe College joined forces with six post-secondary institutions across the province on a new training project that will establish a talent pipeline for the automotive and advanced manufacturing sectors.

In October 2020, Rogers rolled out ultrafast "5G" internet for London, St. Thomas and Woodstock. During the same month, Innovation Works, London's co-working spaces for innovators and change makers, announced their public offering of a Community Bond and thus raising money for the restart-rebuild of the local economy. Further, in October, London's City Council endorsed the creation of the London Community Recovery Network, a community group committed to lead the local recovery process.

In November 2020, The Ontario's Tourism Innovation Lab's "Spark" Mentorship and Grants Program incentivised individuals, small businesses and non-profit organizations to generate new tourism ideas for the region. During the same month Libro gives \$140 to each of its 700 employees to spend locally and boost local businesses.

In December 2020, Green Economy London has announced grants to 14 local organizations supporting 17 sustainability projects. The grants support energy saving, waste reduction, water conservation, and environmental stewardship projects.

The list of the local support and initiatives is not comprehensive, but it attempts to present the local desire for economic recovery and the fast restauration of normalcy.

Beyond the public support, employers' efforts to keep and maintain a qualified workforce for their operations played a significant role for the labour market dynamic in 2020. Table 1 illustrates the job opportunities in the London Economic Region by occupation between January and October of 2020. The table's data is sorted in a descending order by the number of postings listed in the announced period. Only the top 50 occupations were presented here.

Because of the pandemic lockdown the number of postings in the first 10 months of 2020 was smaller than the number of postings during the same period in 2019. However, one could see in 2020 plenty of opportunities for sales, retail salespersons, sales managers (sales colored in blue and management in green). Numerous postings in 2020 were associated with management positions (green color): administrative services manager; retail and wholesale manager; advertising, marketing and public relations manager; corporate sales manager; manager in customer and personal services; human resources management, financial manager; restaurant and food services managers, etc.

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Work opportunities were available in 2020 for applicants with university degree (brown color): registered nurses and registered psychiatric nurses; software engineers and designers; professional occupations in business management consulting; financial auditors and accountants; business development officers and marketing researchers and consultants; professional occupations in advertising, marketing and public relations; human resource professionals; etc.

Numerous job postings were listed regionally in the first ten months of 2020 for applicants with college degree or trades qualifications (yellow color): home support workers, administrative assistants, track drivers, administrative officers, automotive service technicians, social workers, medical administrative assistants, medical technologists and technicians, user support technicians, residential and commercial installers and servicers, electricians, etc.

Table 1. Unique job postings from Jan. 1, 2020 until Oct. 31, 2020 in the London Economic Region

Source: EMSI Analyst

Rank	NOC	Occupation	No. of postings
1	6421	Retail salespersons	1916
2	6552	Other customer and information services representatives	1590
3	4412	Home support workers, housekeepers and related occupations	1210
4	1411	General office support workers	1167
5	1241	Administrative assistants	1111
6	9619	Other labourers in processing, manufacturing and utilities	1035
7	3012	Registered nurses and registered psychiatric nurses	1014
8	0114	Other administrative services managers	917
9	7511	Transport truck drivers	859
10	7452	Material handlers	848
11	0621	Retail and wholesale trade managers	845
12	1221	Administrative officers	825
13	0124	Advertising, marketing and public relations managers	670
14	0601	Corporate sales managers	662
15	2173	Software engineers and designers	556
16	1122	Professional occupations in business management consulting	489
17	1111	Financial auditors and accountants	476
18	7514	Delivery and courier service drivers	473
19	7445	Other repairers and servicers	442
20	7321	Automotive service technicians, truck and bus mechanics and mechanical repairers	430
21	0651	Managers in customer and personal services, n.e.c.	424
22	6541	Security guards and related security service occupations	416
23	6731	Light duty cleaners	405
24	1215	Supervisors, supply chain, tracking and scheduling co-ordination occupations	402
25	4163	Business development officers and marketing researchers and consultants	400
26	7513	Taxi and limousine drivers and chauffeurs	380

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Rank	NOC	Occupation	No. of postings
27	4152	Social workers	378
28	1123	Professional occupations in advertising, marketing and public relations	353
29	0112	Human resources managers	349
30	0111	Financial managers	335
31	1243	Medical administrative assistants	331
32	7611	Construction trades helpers and labourers	330
33	6611	Cashiers	322
34	3219	Other medical technologists and technicians (except dental health)	320
35	1414	Receptionists	314
36	2282	User support technicians	313
37	8431	General farm workers	313
38	1114	Other financial officers	311
39	3124	Allied primary health practitioners	301
40	1121	Human resources professionals	299
41	7441	Residential and commercial installers and servicers	286
42	6623	Other sales related occupations	285
43	6711	Food counter attendants, kitchen helpers and related support occupations	278
44	0311	Managers in health care	276
45	7241	Electricians (except industrial and power system)	274
46	0631	Restaurant and food service managers	273
47	0013	Senior managers - financial, communications and other business services	271
48	0711	Construction managers	269
49	2171	Information systems analysts and consultants	265
50	6411	Sales and account representatives - wholesale trade (non-technical)	257

Finally, numerous work opportunities have been listed in 2020 for candidates with high school diploma or less and on the job training (white color): customer and information services representatives, material handlers, material and courier delivery drivers, repairers and servicers, security guards, light duty cleaners, taxi and limousine drivers, construction trades helpers and labourers, cashiers, receptionists, general farm workers, food counter attendants, kitchen helpers and related support occupations, etc.

Although less postings have been listed in 2020 relative to 2019, the job listings were diverse enough in occupations and industries to appeal to the enlarged pool of unemployed in the London Economic Region.

THE PRESENT: Impacts and actions in the short-term

Impacts felt in London Economic Region

In November 2020, the labour market in the London ER ended with a slightly larger labour force than in January of 2020, 366,100 people vs. 351,000 people respectively (Statistics Canada, 2020, December 14).

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Total employment in the region surpassed the employment size in January 2020, 338,600 people vs. 333,800 people respectively. This was because of the full-time employment, 277,400 people in November vs. 259,300 people in January. Part-time employment was still lower in November than in January, 61,300 people vs. 74,600 people respectively, but very close. The unemployment in the region was still higher in November than in January, 27,400 people vs. 17,100 people respectively. The “not in labour force” population was the same in November as in January 2020, 227,100 people respectively. Participation rate in the region, in November, ended up one percentage point higher than in January, 61.7% vs. 60.7% respectively. The regional participation rate in November was still lower than in Canada and Ontario, 61.7% vs. 64.8% vs. 64.5% respectively (Statistics Canada, 2020, December 4). Unemployment rate in the London Economic Region in November was higher than the value in January 2020, 4.9 vs. 7.5% respectively. The regional unemployment rate was lower than in Canada or Ontario, 7.5% vs. 8.2% vs. 8.7% respectively (Statistics Canada, 2020, December 4). Finally, the employment rate in the region in November was about a half percentage point lower than in January 2020, 57.1% vs. 57.8% respectively. Also, the regional employment rate was lower than national or provincial values, 57.1% vs. 59.4% vs. 58.9% respectively (Statistics Canada, 2020, December 4).

These labour force characteristics indicate that overall, the labour market in the London ER has recovered about 90% relative to the pre-Corona virus pandemic results (January 2020). It remained work to be done with the unemployed in the region as well as with part-time employment. The six months recovery has been unevenly distributed across the subsectors, see Figure 10. Some regional subsectors were harder hit than others by the pandemic. Among those many were leading in part-time employment, e.g. Retail, Accommodation and Food Industry, Educational Service, etc.

From the labour market perspective, it's important to understand the share of employment by sector and subsector in the region. Almost three quarters of the employment in the London ER is in the *services producing* sector while about one quarter of the employment is in the *goods producing* sector, see Figure 14. It was noted earlier in this document that the *services producing* sector suffered a slower recovery than the *goods producing* sector from the labour market perspective.

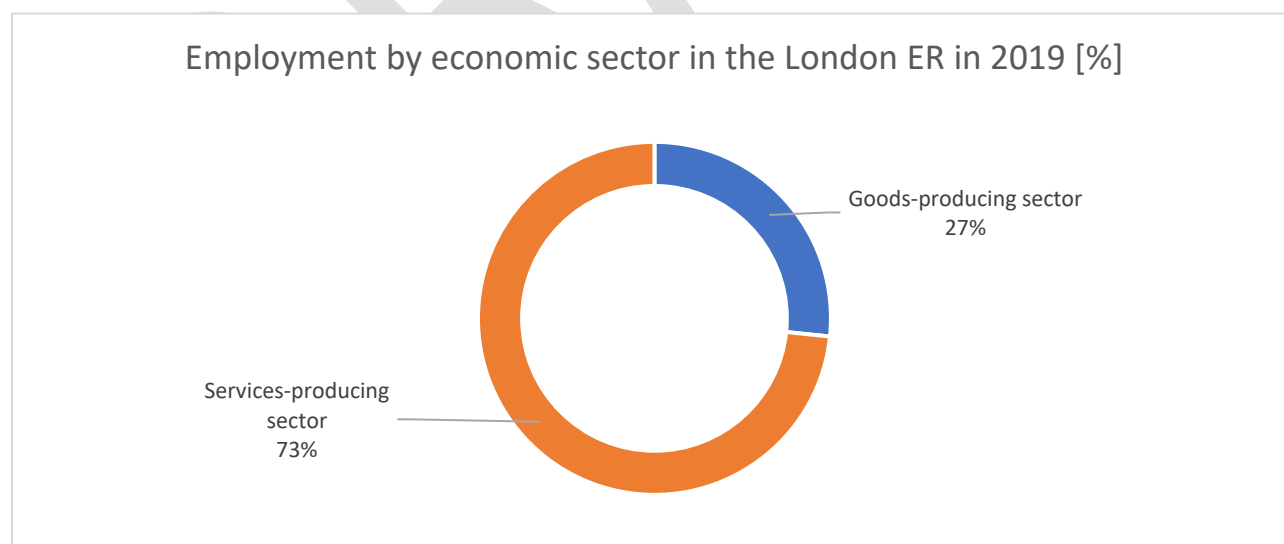


Figure 14

Source: Statistics Canada, Table 14-10-0092-01

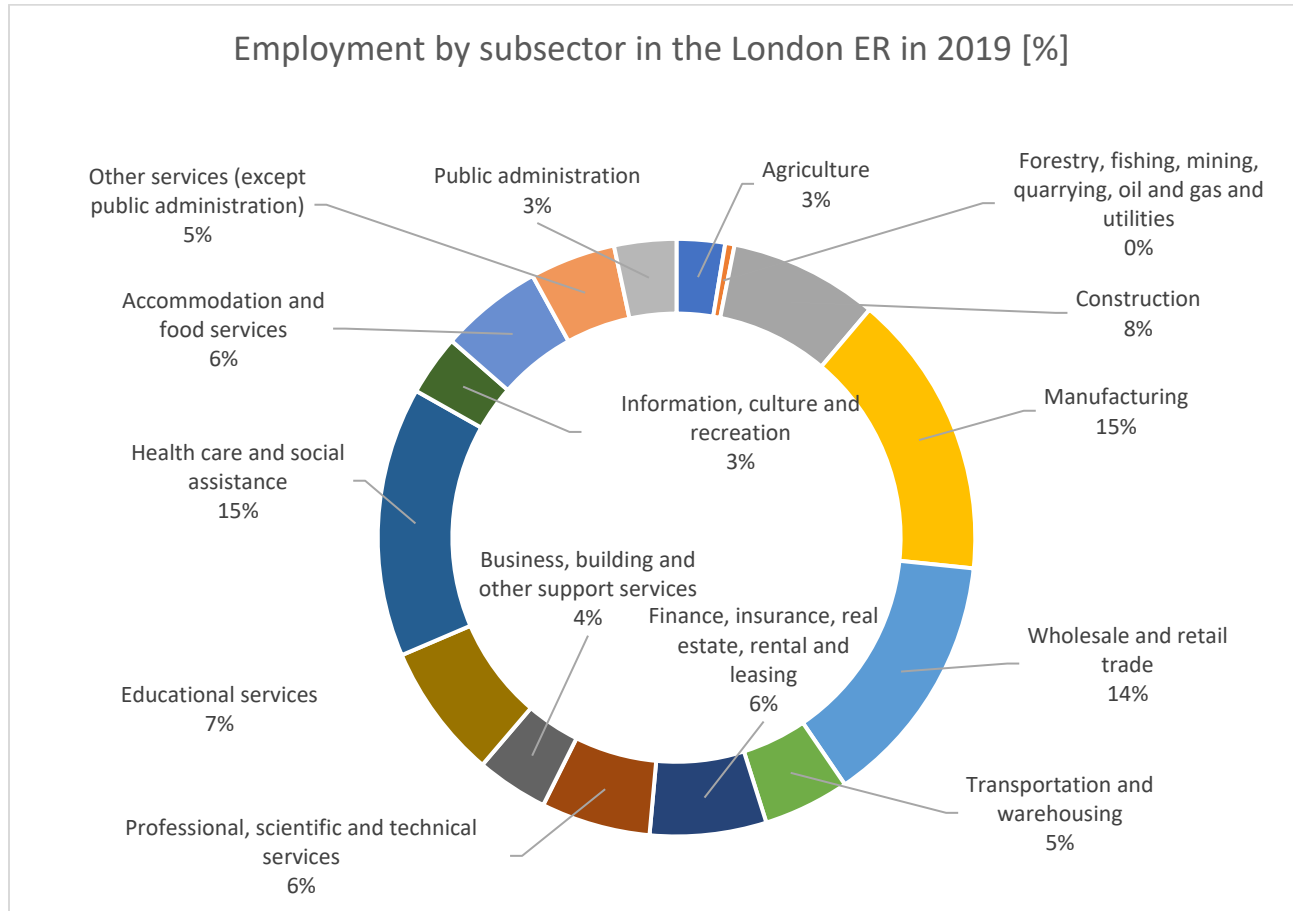


Figure 15

Source: Statistics Canada, Table 14-10-0092-01

Diving deeper in this type of analysis revealed that during pre COVID-19 pandemic the regional leading sectors in employment were *Health Care and Social Assistance* and *Manufacturing*, each owning 15% of the employment in the region (see Figure 15.) Both these subsectors had a stable evolution in the past nine months. *Manufacturing* was hit harder but recovered back quickly.

Next, the *Wholesale and Retail Trade* retained 14% of the total employment in the region followed by *Construction* with 8% share of the regional employment, *Educational Services* with 7% share of the total employment in the London ER. As indicated earlier, the *Wholesale and Retail Trade* subsector suffered a major unemployment hit due to the pandemic, and its share of total employment in the region is significant. The other three subsectors mentioned here were performing well since the beginning of the Corona virus pandemic. The next by the size of the share of employment in the region were *Finance, Insurance, Real Estate, Rental and Leasing* with 6% of the regional employment, *Accommodation and Food Services* with 6% share of the regional employment, and *Professional, Scientific and Technical Services* also with 6% share of the total employment in the region. As revealed in Figure 15, the other subsectors take smaller and smaller shares of total regional employment.

This analysis suggests that the regional labour market recovery strategies should focus first on the subsectors with larger contribution to the total employment in the region: e.g. *Manufacturing*, *Health Care*

and Social Assistance, Wholesale and Retail Trade, Educational Services, and next in a sub second phase to the other subsectors with smaller contributions to the total employment in the region. Taken in consideration the impact of the pandemic on the labour force by subsector presented earlier and the share of employment by subsector, it is suggested that higher workforce planning priority is required for the following subsectors: *Manufacturing, Wholesale and Retail Trade, Transportation and Warehousing, Other Services (excepting Public Administration)*, and *Business, Building Support Services*.

Today, although the regional labour market is recovered at a high degree, many businesses and operators are still fragile to the exposure to the second wave of COVID-19 infections (November 2020), or concurrent pandemics.

Many lessons have been learned since the start of the pandemic among which is that the regional economy is resilient and quickly adaptable to social and economic restrictions.

The prospects have been improved today with the vaccine approval by the Canadian medical authority and by the reception of the first batch of vaccines in December. A source of vaccine has been secured (Pfizer – BioNTech) and mass vaccination campaign has started. About 250,000 vaccine doses are expected to be at hand by the end of 2020 (Tasker, 2020, December 9). Until the herd immunity is achieved, many uncertainties are still governing the regional, provincial and national economies.

Impacts we can anticipate through the RESTART phase

Given the partial recovery of the labour market in the London Economic Region, the current rate of infections with COVID-19 (Red zone declared by Middlesex-London Health Unit) and the positive prospects regarding mass vaccinations in 2021 several work related impacts of the pandemic must be noted:

- People's behaviour will not be the same vis-a-vis work, consumption, leisure, travel, interacting with others, etc.
- Remote working and teleworking remain viable work arrangement alternatives for the future
- Large and incumbent businesses are the winners in the new economy. They possessed resources, or were ready, for the digital transformation. Working for a large company will provide a higher sense of security
- Working from home left many commercial real estates empty, creating major problems for this industry.
- The demand for local superfast connectivity, cloud and security services will skyrocket.
- Home delivery will create new work opportunities.
- Collaboration and community spirit will play a larger role in speeding the economic recovery and generating local resiliency. Private organizations will play a major role in creating the community momentum that sparks recovery.
- Innovations in networking, hardware, software applications, installation, and training will generate new local job opportunities
- Project management software applications that provide connectivity, time management, documenting and archiving, and facilitate on technical aspects of the projects will be in great demand
- Online marketing and social media will take a larger share from the available marketing strategies enlarging the opportunities for communications, public relations, and marketing professionals

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- IT will play a larger role in each business establishment, creating infinite work opportunities
- There will be higher need for digital literacy in order to work effectively and efficiently
- Green and sustainability are high priorities in the new knowledge economy

Existing, ongoing, and planned REACT and RESTART initiatives

In the earlier outline by month of the regional initiatives (London Economic Development Corporation, n.d.) during REACT and RESTART phases of the regional economic recovery several stood out:

- TechAlliance launch of the Future Proof Program to support local business with tools and talent necessary for speeding up the transition to online retail and marketing strategies
- Tec Alliance efforts to connect the region to ORION's network, enabling innovation through advance digital infrastructure. This advanced networking facilitates connection and collaboration across twelve Regional Innovation Centres (TechAlliance among them) in Ontario through Ontario's Next Generation Network Program (NGNP), allowing small and medium enterprises to test and validate their products and solutions.
- Pillar Nonprofit Network's training project design to help students and other job seekers gain in-demand skills so they will be ready for future employers.
- City of London and Fanshawe College launch of a training pilot project to for job seekers.
- The City of London launch of the Construction Dollar Program to support business core-area through customer giveaways, contests and promotions during the summer of 2020.
- McCormick Canada's initiative to raise funds for aiding bars and restaurants in London area to reopen and recover
- Green Economy London provided grants for sustainability projects
- Exar Studios development of an innovative tourism solution showing historical sites in London and Old East of London through augmented reality (AR)
- Libro's repeated initiative of giving its employees money to spend local with the aim for boosting local economy
- City of London endorses the creation of London Community Recovery Network to begin a community led recovery process
- Innovation Works launched their Community Bond with the purpose of raising local funds for economic recovery
- Rogers announces the roll out of ultrafast "5G" internet for London, St. Thomas and Woodstock
- Fanshawe College joins new skilled labour initiative to boost opportunities for students and benefit regional employers
- Tech Alliance launched new online tool to connect regional tech talent with managers of Southwestern Ontario tech companies
- Downtown London association has launched two new programs to provide financial support to its members

Ideas for additional REACT, RESTART, and early RECOVER initiatives

Numerous other regional ideas and initiatives were, or are, at work. The list below is rather limited, but it illustrates our community's efforts and innovation standing the economic downturn post Corona virus pandemic.

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- Between May and July. Food Bank, RBC Place and Y.O.U distributed citywide free lunches to the most vulnerable population in London
- Covid-19 Community Food Box Program was initiated by the LIFE*SPIN in partnership with local businesses to provide direct access to food for fixed-income families, seniors and expectant mothers in London
- Squeaky Wheel Bike Co-op has partnered with Big Bike Giveaway in giving out bikes to low-income essential workers.
- Caremongering groups and neighbourhood pods organized to support each other during difficult times
- London's Centre for Poverty Research advocacy for a green and inclusive economic recovery planning

THE FUTURE: A range of realities, impacts, and responses

A list of key factors influencing the regional economic recovery has been identified by the EMO Workforce Planning and Development Board during August-September 2020 (see Appendix 2). The list has been refined by the local Scenario Planning Steering Committee in September 2020 (Sep.21 and Sep.28). The criteria for the refinement were: 1) difficulty of controlling regionally the factor, which qualifies it as uncertainty and 2) magnitude of impact of the factor on the regional labour market in the next 12-24 months; the higher the impact the better the odds of being selected. These conversations generated two major uncertainties expected to impact the London Economic Region labour market in the next 12-24 months: 1) pandemic resolution (case count, vaccine, mass vaccination planning, etc.) and 2) public support (government funding, inter-community and public initiative, etc.). There were numerous other candidates for critical uncertainties, but the two selected proved to have the greatest impact on the recovery of the regional economy and labour market.

Critical uncertainties

Pandemic resolution

The Corona virus pandemic, officially declared on March 11 in Canada, proved to be an unprecedented epidemic with disastrous effects on people's health and economy. The economic shut down in April-May of 2020 and the social distancing measures had unimagined effects on businesses, and economy in general. The earlier sections underlined specific effects by each subsector of the economy. Unfortunately, between March and December of 2020 the prospects of having a viable vaccine soon were almost none. The medical community in Canada and around the world made extraordinary efforts to understand the illness, find viable treatments, and develop a proven vaccine against it. Although presently the prospects for a resolution have improved with the December 2020 approval by the highest medical authority in Canada of the Pfizer-BioNTech vaccine, the virus is spreading fast due to the cold season and the related celebrations which bring more people together. In the London Economic Region, in December 16 there were reported 3,090 cumulative cases, 2257 cumulative cases in Middlesex-London Health Area and 833 conformed cumulative cases in Oxford Elgin Health Area. The Middlesex-London Health Area was declared Red while the Oxford Elgin was declared Orange with high prospects of moving into Red.

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Unless mass vaccination is rolled out and herd immunity is achieved the COVID-19 illness will continue to dramatically affect our lives and economies. Therefore, pandemic resolution had the highest odds for being selected as a critical uncertainty for our scenario planning model.

The list of indicators considered for assessing the evolution of this uncertainty are listed in Table 2.

Table 2. Pandemic resolution indicators

Indicator	Indicator type	Geography	Data source
New COVID-19 cases since the previous day	Main	Middlesex-London & Southwestern Public Health Oxford Elgin – St. Thomas	Middlesex London Health Unit Southwestern Public Health
Total number of COVID-19 cases	Main	Middlesex-London & Southwestern Public Health Oxford Elgin – St. Thomas	Middlesex London Health Unit Southwestern Public Health
Total deaths	Main	Middlesex-London & Southwestern Public Health Oxford Elgin – St. Thomas	Middlesex London Health Unit Southwestern Public Health
New deaths since the previous day	Main	Middlesex-London & Southwestern Public Health Oxford Elgin – St. Thomas	Middlesex London Health Unit Southwestern Public Health
Total number of cases by location	Main	Middlesex-London & Southwestern Public Health Oxford Elgin – St. Thomas	Middlesex London Health Unit Southwestern Public Health
Cumulative incidence rate by location	Main	Middlesex-London & Southwestern Public Health Oxford Elgin – St. Thomas	Middlesex London Health Unit Southwestern Public Health
Outbreaks	Main	Middlesex-London & Southwestern Public Health Oxford Elgin – St. Thomas	Middlesex London Health Unit Southwestern Public Health
Chief Public Health Officer of Canada announcements	Main	Canada	Government of Canada
Business confidence level	Secondary	Nation	The Conference Board of Canada
Consumer confidence level	Secondary	Nation	The Conference Board of Canada

Some of the indicators considered in Table 2 were used in developing the [Scenario Planning Dashboard](#).

Public support

During crises economic stimulus can keep economies afloat or recover them at higher speed. Federal and provincial government policies play an extremely important role during economic downturns. At local level the resources, will, and innovation can speed up the economic recovery process. However, economic stimulus cannot run forever since debt can become a difficult burden for any economy after crisis. The current pandemic challenged many of the traditional economic principles and methods due to its length and magnitude of impact. Consequently, there is high degree of uncertainty associated with the ability of all forms of government (national, provincial and local) to provide relief and adequate stimulus. Because of its impact on the economy and income, this critical uncertainty was selected as the second dimension for the scenario planning modeling presented here. Table 3 presents examples of indicators considered for assessing the trajectory of the public support dimension.

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Table 3 indicators for evaluating the progression of the public support dimension in London ER

Indicator	Indicator type	Geography	Data source
Governor General speeches and announcements	Main	National	The Conference Board of Canada
Government of Canada announcement	Main	National	Statistics Canada
Provincial government investment announcements	Main	Provincial	Provincial Government
Federal Government new funding streams	Main	National	Atlantic Canada Opportunities Agency
Federal Government funding of new initiatives associated to COVID-19	Main	National	Federal Government
Business confidence level	Secondary	Nation	The Conference Board of Canada
Consumer confidence level	Secondary	Nation	The Conference Board of Canada

Indicators from Table 3 were considered in developing the [Scenario Planning Dashboard](#).

Scenario matrix

Based on the possible interactions between the two identified critical uncertainties, the **Elgin Middlesex Oxford Workforce Committee** has drafted the four following scenarios:

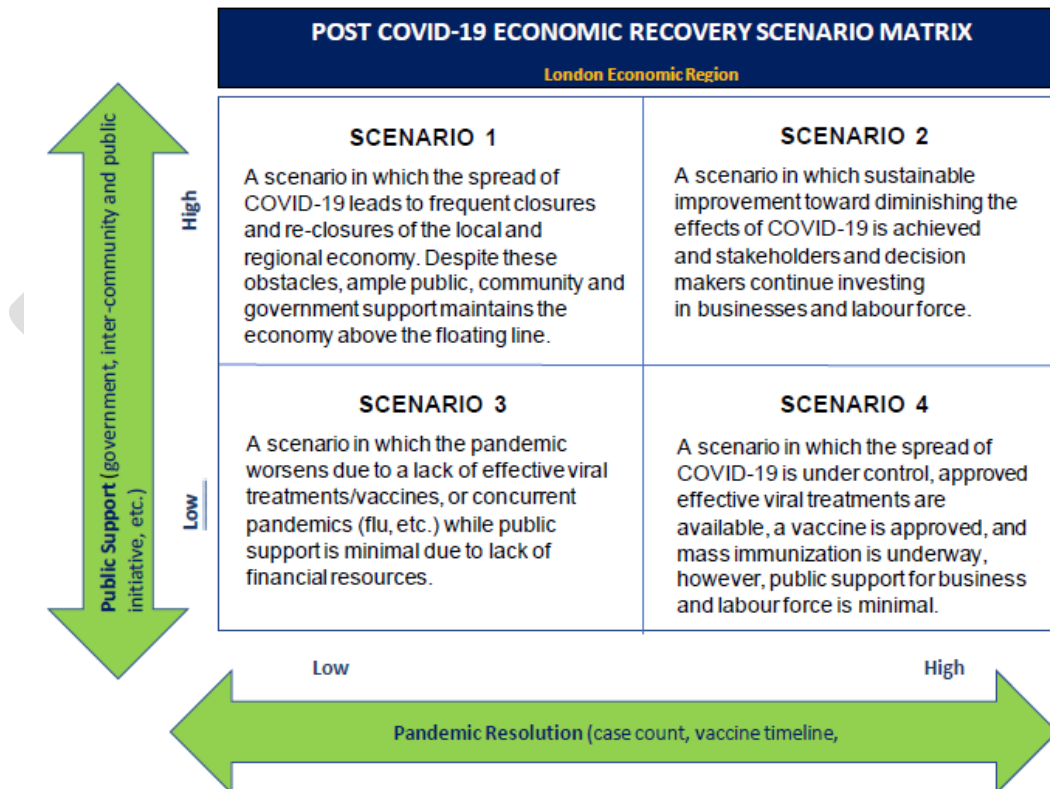


Figure 16

Four scenarios: in detail

Scenario 1: Low pandemic resolution and high public support

A scenario in which the spread of COVID-19 leads to frequent closures and re-closures of the local and regional economy. Despite these obstacles, ample public, community and government support maintains the economy above the floating line. This scenario emulates very closely the reality lived during March-November of 2020 period.

Assumptions: high number of COVID-19 cases; viral treatments and drugs are in development; no vaccine yet approved; concurrent pandemics can develop; restrictions continue for movement of merchandise and people; wage subsidies and unemployment benefits are available; emergency business supports (rent relief, taxes, etc.) are available; favourable legislation to attract foreign investment is enacted; increased awareness and concern about consumer health; drastic changes regarding work on the roll and consequently major changes in consumption habits; common understanding of e-commerce and e-services are established; etc.

Current and Projected Skills Shortages

Since working remotely and working from home will be the work arrangement favoured alternative in this scenario, IT skills will be in great demand (networking, web development, e-commerce setting, software design and training, training to efficiently use of the teleconferencing software, cyber security, cloud services, artificial intelligence, etc.). Going hand in hand with these there will be a local need for professionals in ultrafast telecommunication and internet services (5G) provided by the telecommunication companies (content streaming, gaming, conferencing, internet of things, etc.).

As more people will be restrained to spend their time locally due to the travelling restrictions, gaming will become a more popular version of leisure (game programmers, sales, marketing, etc.). Sports TV, Travelling and History channels video streaming will increase due to the traveling and tourism restrictions.

Digital advertising and marketing will become the main promotional alternatives. Specialists in SEO, social media advertising, communications, etc. will be in higher demand than before.

Advances in Personal Protection Equipment will arise to make people's life easier. The demand for engineers and designers will be taking off. Also, since the number of COVID-19 cases will pick up medical research for Corona virus treatments will expand – the demand for research medical doctors and physicians and laboratory technicians will increase.

A worrisome issue is commercial property. Since a lot of workers in the knowledge economy will be able to perform their duties from home or remotely, numerous office buildings will be vacated if the pandemic resolution continues to be a problem without a solution. Numerous real estate property consolidations will happen, and significant workforce restructuring will appear in *Business Building and Support Services* subsector as well as in *Waste Management* subsector.

If pandemic resolution remains low for and unforeseen time horizon, *Health Care Services* subsector will become overwhelmed. First it will have to deal with the extensive number of infections with COVID-19 and in parallel the mental health issues developed in the population due to the extensive periods of social isolation. The demand for medical personnel will remain high in the region during this scenario.

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Unfortunately, the needed talent will not appear overnight. Professional regulations imposed in the medical field will create some shortages in this field.

Curb delivery and home delivery will get traction. Sales representatives, drivers, order fillers, etc. will be in great demand.

Unfortunately, under this scenario numerous small businesses in *Accommodation and Food Services* subsector will go bankrupt, being unable to deal with the extended periods of reduced or lack of demand.

Home improvement will maintain high since money otherwise allocated for travelling would be directed for small improvement projects at home. The *Construction* subsector will stay resilient. Therefore, trades journey personas, installers, helpers, contractors, etc. will be in demand through such a scenario.

Arts performers will be in trouble since concert halls, theatres and other venues will be closed. The *Information Culture and Recreation* subsector will suffer under this scenario.

The balance of demand for skills in some sectors will balance out the lack of demand in others under this scenario. The public support will create the breathing window necessary for people losing their jobs in some subsectors to pick up the demand in others. Overall, under this scenario it is expected a slow economic growth.

RECOVER Stage: January 2021 – March 2022

The year long recovery is needed to quickly retrain and transfer some with skills from subsectors losing ground under this scenario into subsectors with growth. This process will be tedious and complicated. A one-year recovery is optimistic, but public support is essential to make this happen. *Manufacturing* will suffer since the economic growth will be slow and export will be affected by border crossing restrictions, renegotiated international trade agreements, and potentially reduced demand for Canadian products outside the country.

Early RESILIENCE stage: April 2022 - September 2022)

The resilience will start when the reassignment of talent in the local economy is balanced and the new knowledge-based economy is settled locally. It is assumed that the local innovation and entrepreneurship will generate locally enough demand for the COVID-19 displaced workers. The new allocation of talent regionally is optimal for the remote working and social distancing conditions.

Another potential alternative would be that while the local economy is recovering, advancements in developing vaccines are gained and thus the economy will transition to a more favourable scenario.

Recommendations for businesses in this scenario

- Keep applying for and using any relief provided by various levels of government.
- Look at local collaborative alternatives that enhance alliance synergies
- Find innovation within the firm
- Promote local shopping. Loyal to local.

Recommendations for new policies, investments, programs and supports

Support for business

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- Keep the subsidy programs in place and enhance upon them as businesses will require the subsidies more than ever to rebuild
- Funding to support the rebuilding of small business
- Clearer advice and more clarity around how to react to COVID type symptoms for Essential Workers in particular
- Retraining programs for those displaced
- Subsidization of PPE, wages, utility costs

Mindset and wellness

- Mental health support
- Improve consumer confidence
- Improve communication about situation

Digital support

- Broad Band and Hi Speed internet everywhere
- Internet connection in rural areas and remote areas
- Grants for 5G networks
- Internet security/payment security support
- Support for e-commerce development
- WFH support, customer service for workforce support
- Develop technology lending libraries
- Phones and computers for everyone

Training

- Assistance to engage and train those not currently connected (ie. seniors)
- Retrain tourism/hospitality workers to new career paths
- Digital literacy for seasoned business owners resisting digital shift
- Assist job seekers in connecting directly to employers, not just general job prep
- Robust online learning
- Training for soft skills – adaptability, resiliency, networking, agility, self-directed learning, self-reflection

Increase coordination between business and service providers

- Excellent communications and ongoing availability of PPE
- Creative outreach to bring customers into business
- Local labour market info
- Ensure information on support is shared as quickly as possible and by various means

Financial support

- Funding for tourism and accommodation subsectors
- Transportation
- Internationally competitive online education infrastructure

Scenario 2: High pandemic resolution, high public support

A scenario in which sustainable improvement toward diminishing the effects of COVID-19 is achieved and stakeholders and decision makers continue investing in businesses and labour force. This is the most optimistic and favourable scenario.

Assumptions: low number of COVID-19 cases; high discipline in reducing community spread of the virus is established; viral treatments and drugs are approved; a vaccine is approved; mass immunization begins; no concurrent pandemic is developing; wage subsidies and employment insurance benefits are available; emergency business supports (rent relief etc.) are available; favourable legislation is enacted to attract foreign investment; public achieves increased awareness and concern about consumption practices; increased demand for new skills; traveling and public transportation pick up; etc.

Current and Projected Skills Shortages

This scenario quickly brings the local economy to the normal. The economic shock of the past 8 months will be felt a little while longer even under this optimistic scenario. As emphasized earlier in the report, *Manufacturing* subsector will have a slack in recovery. Although this optimistic scenario assumes that national demand for products and services will get back to normal in short time and grow vigorously after that, there is uncertainty regarding the export demand. The export demand depends on the speed of recovery of our major trade partners (USA, Mexico, EU, UK, China, India, South Korea, Latin America). It is possible that manufacturing will get slower back to normal.

However, under this scenario the services producing sector will recover fast and grow afterward. The *Retail and Wholesale Trade* subsector will come back revigorated by the relief of any social restriction. Some retailers will innovate faster due to the experience of the pandemic, transitioning faster to the online selling and marketing. The adoption of technology will be accelerated by the prior experience and the continuation of sustained economic incentives. The IT skills will be very relevant in the newly emerging economy where online business activity will share equal equity with physical shopping. Web design, computer engineering, cyber security, e-commerce, networking, cloud services, faster internet, etc.). This natural evolution of the Retail sector will bring opportunities for product delivery. Carriers and postal services workers, drivers, private transport operators, packers, and others will be in demand.

Since general demand for products and services is assumed to grow under this optimistic scenario, the *Transportation and Warehousing* will fully recover. The demand for supply chain planners and schedulers, managers, analysts, drivers, warehouse workers, etc. will pick up quickly.

The restaurants, bars and other food services operators will pick up their losses and step forward for recovery and growth into resiliency. The need for chefs, cooks, servers, bartenders, etc. will come to normal. Restored *Tourism* sector will help with the demand for *Accommodation and Food Services*. Travel agents, receptionists, hotel managers, restaurant managers, cleaning persons, drivers, etc. will be again in demand.

Teachers and students will be able to go back to the classroom settings. The pandemic experience will force upon innovation and change in certain areas of *Educational Services*. However, the upgraded learning conditions will require again qualified teachers able to teach in both settings, in class and online. Some efficiencies will be gained through the online educational services since the delivery of the classes is less dependent on physical classrooms' capacity. This optimistic scenario suggests that most likely the international students will be able to travel again to Canada to earn their degrees of interest. The demand for teaching skills will be again up to the roof.

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The *Health Care* subsector will be relieved after the intense stress during the COVID-19 pandemic, some restructuring and consolidation will go after life gets back to normal. All these will be done with the aim for achieving efficiency and lower the costs. Possibly that workforce in the sector will remain the same or diminish under this scenario due to reduce demand for COVID-19 medical services. There will be opportunities for the trained professionals who will be restructured to transfer their skills in the *Long-Term Care* subsector where the need for higher quality of care have been noted during the strike of the COVID-19 pandemic. *Mental Health* will long for a while after the pandemic is resolved and will look for the medical skills of those that under this scenario will lose their jobs.

Farm operators will be relieved to see the alleviation of restrictions for temporary workers. Cost efficiencies will be achieved under this scenario by farmers. However, some of the local workforce will become too expensive and loose their jobs. Opportunities for these people will arise in horticulture and landscaping. Once the good old times are coming back, the need for land care and beauty will emerge across commercial real estate operators and private individuals.

The demand for art performers will spike back, with force, since people are thirsty for entertainment after such a prolonged period of restrictions. The gyms will be packed again and the need for personal trainers, nutritionists, gym attendants, managers, coaches, etc. will be back again.

The need for public administration employees will be still high since a lot of programs started during the pandemic will roll on to keep the recovery-growth momentum.

Under this optimistic scenario, basically all the regional economic subsectors will create opportunities for work.

RECOVER stage: January 2021 – December 2021

In this stage, the regional subsectors most affected by the COVID-19 pandemic will return to the pre COVID-19 employment levels. *Manufacturing, Transportation and Warehousing, Accommodation and Food Services, Business, Building and Support Services and Waste Management* will pick up the slack in employment. There will be a lot training rolling on for upgrading workers and professionals to the level of digital skills commanded by the new economy.

Early RESILIENCE stage: January 2022 – March 2022

In this stage, businesses will gain confidence in the progress of the economy and will start investing in new business projects expanding the existing regional workforce. Depending on the speed of recovery, there will be shortages for certain skills.

Recommendations for businesses in this scenario

- Accelerate your technological transformation to keep up alive
- Use available supports to start your technological advancement
- Work with the regional educational partners to speed your technological change (Western University, Fanshawe College, etc.)
- Train and prepare your workforce for the digital economy
- Collaborate with community partners to save on marketing and advertising
- Develop ideas that can help locally your business neighbours

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- Embrace the community spirit, which has a stronger meaning since the strike of COVID-19 pandemic

Recommendations for new policies, investments, programs and supports

Building Resiliency

- Programs to support women impacted by the pandemic
- A coherent unemployment income plan to adapt to shifting work loads
- Preparation for future pandemics
- Mental health as healthcare
- Subsidized skills training
- Improved tax incentives for home offices
- Clear health and safety regulations
- Plug into programs that are well underway. Too many lone rangers will dilute the collective's efforts
- Reduce unnecessary government spending/debt level
- Insure equal access to skills training (digital and soft skills) for all employers
- Connect strategic programming with local labour market information
- Better sense of community
- Restore back the confidence of businesses and consumers

Supporting Innovation

- Infrastructure grants
- Equipment and technology grants
- Support for entrepreneurs
- Enhanced support for small business
- Support construction grants
- Business support in non-traditional areas
- Development incentives

Community improvements

- Immigration support community promotion
- Immigration acclimation
- Subsidized volunteering
- Housing/affordable rental units
- Transportation system
- Maintain constant communication and enhance local collaboration

Support local

- Focus on accommodation and food services industry
- Restore the traveling and tourism businesses
- Promote local businesses

Investment in training is improved

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- Smaller classes and more digital literacy for students' futures
- Refine education and training models
- Folks lining up to learn new skills

Collaborations abound

- Awareness and campaigns
- Open doors – people want to meet in person
- Profit sharing the new norm
- Training programs lead directly to jobs

Scenario 3: Low pandemic resolution and low public support

A scenario in which the pandemic worsens due to a lack of effective viral treatments/vaccines, or concurrent pandemics (flu, etc.) while public support is minimal.

Assumptions: high number of COVID-19 cases; viral treatments and drugs are in development but not available; no vaccine is approved; concurrent pandemics are developing; restrictions continue on travel for merchandise and people; wage benefits and unemployment subsidies are unavailable; major disruptions in the supply chains; minimum available emergency business support (rent relief etc.); public funding forced to choose between winners and losers; minimum to no foreign investment; limited demand for skills and talent; highlighted digital divided; traveling and public transportation reduced to minimum; accommodation and food industry demolished, high number of bankruptcies, etc.

Current and Projected Skills Shortages

This scenario is the most pessimistic and will create the deepest economic recession in Canada since the Great Depression. Under this scenario most economic subsectors in the London ER will be negatively affected. The lack or the reduced amount of economic stimulus will make recovery very difficult. Businesses must mostly rely on local resources and innovativeness. Regional public initiative can keep the recession to decent levels.

First, the *services producing* sector will be primarily in disarray because of the prolonged exposure to COVID-19 illness and lack of valid solutions. The *Accommodation and Food Services* subsector will run at minimum capacity. Many businesses will collapse under this long financial hardship. Home delivery will keep alive some of the businesses. Hotel operators will be in trouble. Travel restrictions will keep people home. A large part of the workforce in this subsector will be displaced looking for other opportunities. Technological innovation created for virtual visiting and learning could absorb some of the newly displaced workforce in the subsector.

Manufacturing subsector will be unequally impacted. *Food Manufacturing and Beverage* will keep running at high capacity due to the need for essentials, and food variety in general. Manufacturing of construction materials will do relatively fine. The low business and consumer confidence will call for reduced operating capacity of this subsector overall. As suggested earlier in the report, manufacturing work settings offer a medium risk of exposure to the COVID-19. However, economic lockdowns with the purpose of controlling the spread of the virus lead to depressed demand for durable goods. Consequently, numerous manufacturing engineers and technologists, technicians, trades people, machinists, material handlers, etc. will lose their jobs looking for other job opportunities.

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Retailing will be cut in half due to the social distancing restrictions. However, the e-commerce will become the mainstream for sales. Financial and delivery innovation will create new work opportunities for the priorly involved in retailing. Customer service departments will be flooded with returned products because the of the distorted perceptions created by the online description and images of the products. Customer sales representatives, online support technicians will be in great demand. Drivers and postal service curriers will be also in high demand. Product servicing installers and representatives will be also needed under this scenario.

Construction will diminish considerably since businesses and consumers confidence will drop under this pessimistic scenario. Trades people, material handlers, construction engineers and technologists, will be displaced under this scenario. Lack of government incentives will keep confidence low continuing to drive down the number of projects. Individuals will be less attracted to take mortgages and build new houses or buy pre-owned ones,

Health Care will continue to be under high level of strain due to the minimal resources, lack of support and high rate of infections. Under such circumstances expanding the existing workforce seems impossible. Consequently, there will be limited opportunities or reallocation of talent in this subsector.

Also, *Educational Services* subsector will operate at reduced capacity since some of the international students will postpone earning their certificates or degrees due to the traveling restrictions. However, slowly the sector will show signs of improvement once the online courses become more and more popular. The diminished demand for educational services could appear due to the repeated periods of lock down needed for controlling the spread of the virus. More and more parents will see the value of the online teaching but one of the parents will be indefinitely confined at home to care for the children at home.

Transportation and Warehousing will be suffering the consequences of the significantly diminished Retail and Wholesale subsector, Manufacturing, and other. Drivers, warehousing people, planners, schedulers, supply chain analysts, buyers, etc. will see their work opportunities diminishing by day.

Overall, the national and provincial economy will enter a recession, which will negatively affect most of the local subsectors.

REACT- RESART stages: January 2021 – June 2022

During this period regional businesses will have to adjust their businesses to meet the existing demand of products and services. Local talent will be reallocated to achieve effectiveness and efficiency under the given circumstances generated by this scenario. Unemployment will increase at unprecedented levels. The minimal economic stimulus will keep the unemployed waiting in long waiting lines for work opportunities. Some of the human capital will lost in this struggle.

Early RESILIENCE stage: July 2022 – June 2022

Resiliency will be difficult to achieve. It would mean operating at the pre COVID-19 pandemic level of employment. Skills upgrading will be needed in order to make job applicants ready for the new economy. Salvation could come only from within. Community spirit and innovation will speed up the restart and recovery. Also, local resources will play an important role.

Recommendations for businesses in this scenario

- Live within your means. Be frugal with your expenses.
- Innovate because human capital could leverage the current crisis.
- Learn and invest as much as possible about technology and how you can leverage it to stay in business.
- Provide livable income.

Recommendations for new policies, investments, programs and supports

Collaboration

- Collaboration of similar businesses
- New partnerships in community
- Diversification of local producers and resources etc.
- Rally private supports, from charitable groups or sectors not impacted as much
- Development of microeconomies (i.e. small villages working together)
- Increase volunteering work
- Helping your neighbours; check in on family and friends

Community Action

- More of a push for buy local
- Patience and understanding
- Live with less mindset
- Community mindset
- Employers and companies needing support of staff
- Low public support in Oxford county is not optional. This community strives to pull through together
- Social services are vital
- Support for food bank
- Mergers/consolidations of social service organizations
- Bank on local resources
- Hearing directly from the most impacted groups conversation around social unrest
- Stronger non-profit networks
- Completely open intakes for programs, no barriers for entry
- Increased counselling

Safety

- Health measures/PPE in high demand
- Security and Safety Measures
- Continuous communication that people can work safely

Increase mental health resources counselling services

- Significant investments in mental health services
- Mental health and addiction support and resources
- Personal/family resilience becomes front of mind - gardens, canning

Stabilization funding support for business

- HR assistance for on-going challenges
- Increased government spending, debt, taxes

Increased education and communication for pandemic management/protocols

- Map out local training opportunities – are there enough? The right kinds?
- Remote work is normalized, build infrastructure that promotes hybrid operations

Scenario 4: High pandemic resolution, low public support

A scenario in which the spread of COVID-19 is under control, approved effective viral treatments are available, a vaccine is approved, and mass immunization is underway, however, public support for business and labour force is minimal.

Assumptions: low number of COVID-19 cases; great discipline in reducing community spread of the virus is established; effective viral treatments and drugs are approved; a vaccine is certified and approved; mass immunization begins; no concurrent pandemic is developing; normal movement of people and goods is resumed; wage subsidies and unemployment supports are low; minimal availability of emergency business supports (rent relief etc.); decreased awareness and concern about consumer health and pollution; increased consumption of e-services, etc.); slow build up of business due to minimum economic incentives available, etc.

Current and Projected Skills Shortages

This scenario's circumstances suggest that because of the reduced available stimulus the RECOVERY-RESILIENCE will be achieved at a slower pace than needed. Less economic incentives invested regionally means fewer employment programs to help those separated from the labour market during the COVID-19 pandemic to reconnect with the employers in the area. Further, minimum government incentives will hold for longer the technological transformation of the small businesses ignited by the pandemic.

Therefore, it is predicted that under this scenario the services will come around and recover the lost ground during the pandemic. Consumers will regain their confidence and trust in the social life and start to get out for eating or entertainment. The long-postponed travels and vacations now become feasible. Slowly the employment in the *Accommodation and Food Services* subsector will start growing putting the subsector on the road of recovery. Again, the speed of recovery will be slow.

The employment in manufacturing will not grow for a while since the production of PPE will slowly reduce, and the external demand for Canadian products and services will be uncertain due to the recovery of Canada's main trading partners, the renegotiated trade agreements and other unforeseen issues.

However, alleviation of the travel restriction will revive the *Transportation and Warehousing* subsector. Regional airports will become busy again. Commercial air transportation will get back slowly to the pre COVID level of business. Since the economic activity will pick up movement of products will intensify, and the warehousing business will slowly grow.

Under the circumstances of high pandemic resolution, the *Construction* subsector will be slowly incentivized by businesses investment in new projects and by individuals driven by housing ownership. Employment in the Construction subsector will grow marginally.

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Health Care subsector will be relieved by the huge pressure of COVID-19 cases and therefore will go into a restructuring and consolidation to achieve efficiency again. Some of the personnel will be let go but they will find easy opportunities into the newly restructured *Long-Term Care* subsector, which has proven to have flaws during the pandemic. *Mental Health* will thrive due to the pandemic effects on people.

Regional *Agriculture* subsector will gain some efficiency due to the access to temporary workers again.

Information, *Culture and Recreation* will get back in shape. Performing artists will be able again to entertain large crowds on concert halls, theatres and stadiums. Local festivals will be able to bring back enthusiastic public and performers together.

Business, Finance, Real Estate, Rental and Leasing subsector will continue to grow since the public confidence in the future of the economy is restored. If the interest rates will continue to stay low, businesses and individuals will make investments and the sector will stay resilient.

Educational Services subsector will suffer some employment loses due to the efficiencies gained through online learning and adjustment of the international demand for Canadian programs. Local campuses will stop expanding since physical space for teaching became less relevant. However, campus social life remains essential for the formation of the youth.

Business, Building and Support Services subsector will recover slowly under the context of this scenario. Since businesses will get back to life, the need for business support, document management, personnel records, waste management and cleaning will grow.

Finally, since consumers' confidence will be restored, they'll get back to visiting stores hungry for the experiential shopping, which they missed for so long. However, some of the retail business would be transferred to the online shopping because consumers became more familiar with during the pandemic.

Consequently, employment in the *Retail and Wholesale Trade* subsector will start growing slowly on a trajectory for a complete recover in a year and a half.

RECOVER stage: January 2021 - June 2022

Under this scenario public confidence in the resolution of the pandemic is restored and gradually the life is returning to normal. It is predicted that all economic subsectors in the London ER will be revived. Employment will gradually be restored to the pre COVID levels in a year and a half. Some of the sectors will be faster than others during the recovery. The reduced stimulus available will slow down the recovery process. However, the local thrive for normalcy, initiative and innovation will help the recovery process.

Early RESILIENCE stage: July 2022 – December 2022

In the context of the present scenario, the RESILIENCE will be achieved around the mid of 2022. This means that the regional economy will continue growing at a steady pace reassuring optimism for the future. The regional subsectors will align to these growth prospects at various speeds.

Recommendations for businesses in this scenario

- Invest in technology and put your business on the path of success in the new economy
- Help your community to recover
- Find innovators inside the business. They can put your business ahead of the competition

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- Train your workforce for the new business model and the knowledge driven economy. Provide training in order to alleviate the potential skills mismatch
- Collaborate locally and leverage potential synergies developed by the diversity of resources and capabilities
- Develop local supply chains. Rely less on global supply

Recommendations for new policies, investments, programs and supports

Workplace changes

- More recruitment perks
- Employer acceptance of mental health days
- Employee vaccination programs
- Former employees to come back into workforce
- Patience from employers as employees gradually learn how to be around people again
- Focus on work-life balance
- Better protection for the workforce, enforce the labour laws

Collaboration

- Sharing of resources between employers
- Job fairs
- Skills retraining
- Assess local strengths and go from there
- Engage youth the recovery planning/efforts
- Provide travel incentives
- Convince employers to invest in new projects
- Community support mechanisms and program
- More collaborations for simplified service experience

Attitude shift

- Continued compassion
- Messaging that the worst is over
- Customers to come back
- Volunteering

Mental health support

- Resiliency training
- Communication that it's safe to come out of your house

Get people connected again

- Message that it's safe to go back to work
- Grass roots campaign about "COVID is over"
- Encourage young graduates to stay local
- Public appreciation campaigns for small business
- Promotion of job opportunities and choice for job seekers

RECOMMENDATIONS

The scenarios can be used as guiding frameworks for planning local workforce initiatives and economic development. The scenarios represent somewhat extreme cases. The reality can be anywhere in between of these four scenarios portrayed in the present document. However, they can be very useful in anticipating outcomes and making decisions.

Each scenario lists an extensive number of solutions envisioned by the participants to the community stakeholder consultations throughout the months of September-December 2020. The outcomes will depend of the execution of the suggested actions, local resources available and talent of people involved.

As the end of November 2020, the economy was heading toward Scenario 1 (low pandemic resolution, high public support). However, since the recent approval of the Pfizer-BioNTech vaccine and the beginning of the immunizations in December 2020, the prospects of moving towards Scenario 2 (high pandemic resolution and high public support) increased. There is some uncertainty regarding the effectiveness of the vaccine, which makes economic recovery fragile to any turn around situation.

BIBLIOGRAPHY

- Allen, C. (May 19, 2020). UBC economists create tool to measure COVID-19 risk in B.C. jobs. Arts & Humanities section. UBC News. UBC. Retrieved December 9, 2020 from <https://news.ubc.ca/2020/05/19/ubc-economists-create-tool-to-measure-covid-19-risk-in-b-c-jobs/>
- Government of Canada (2020, December 10). *Canada's COVID-19 Economic Response Plan*. Retrieved on December 14, 2020 from <https://www.canada.ca/en/departement-finance/economic-response-plan.html>
- Government of Ontario (2020, March). Ontario's Action Plan: Responding to COVID-19. Retrieved on December 14, 2020 from <https://budget.ontario.ca/2020/marchupdate/index.html>
- Job Bank Canada (n.d.). Trends and events in Ontario's labour market. Retrieved December 10, 2020 from <https://www.jobbank.gc.ca/trend-analysis/job-market-reports/ontario>
- London Economic Development Corporation (n.d.). News. London Economic Development Corporation. Retrieved November 1, 2020 from <https://www.ledc.com/news>
- Statistics Canada (2020, December 14). Table 14-10-0293-01. Labour force characteristics by economic region, three month moving average, unadjusted for seasonality. Retrieved in December 14, 2020 from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410029301>
- Statistics Canada (2020, December 4). Labour market indicators by province, territory, and economic region unadjusted for seasonality. Retrieved in December 14, 2020 from <https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2017002-eng.htm>
- Taker, J.P. (2020, December 9). Health Canada approves Pfizer-BioNTech COVID-19 vaccine. CBC – Politics Section. Retrieved December 14, 2020 from <https://www.cbc.ca/news/politics/vaccine-rollout-plan-phac-1.5833912>

Appendix 1

Elgin Middlesex Oxford Workforce Committee membership and meetings

Participant	Organization	Meeting	Date
Alan Smith	County of Elgin	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Cara Finn	County of Middlesex	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Cephas Panschow	Town of Tillsonburg	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Cindy Hastings	City of St. Thomas	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Robert Collins	London Economic Development Corporation	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Gary Blazak	City of London	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Janice White	Libro Credit Union	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Jeff Surridge	CES Oxford	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Joanne Wolnik	SWOTC	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Josie Lane	Libro Credit Union	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct

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Kate Burns Gallagher	WOWC	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Kathryn Leatherland	Tillsonburg Multi-Service Centre	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Kim Earls	SCOR Economic Development	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Laura Gibson	MEDJCT	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Debra Mountenay	EMO WPDB	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Natalie Surridge	CES Oxford	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Tamara Kaattari	Literacy Link South Central	Scenario Planning Steering Committee	21-Sep, 28-Sep, 19-Oct
Participant	Organization	Meeting	Date
Brian Gallacher	Innovata Foods	Oxford Employers Round Table	22-Oct
Carla Dilellio	People Management Group	Oxford Employers Round Table	22-Oct
Cheryl DeCooman	People Management Group	Oxford Employers Round Table	22-Oct
Dave Foster	Arcelormittal	Oxford Employers Round Table	22-Oct
Denis Guy	County of Oxford	Oxford Employers Round Table	22-Oct
Jeff Gulas	Greenlea	Oxford Employers Round Table	22-Oct
Jeff Surridge	Community Employment Services Oxford EO	Oxford Employers Round Table	22-Oct
Jessica Nancekivell	Woodstock General Hospital	Oxford Employers Round Table	22-Oct

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Katheryn Leatherland	Tillsonburg Multi Service Centre - EO	Oxford Employers Round Table	22-Oct
Katie. DeWachter	MRRCA	Oxford Employers Round Table	22-Oct
Kinga Sopronyi	Marwood	Oxford Employers Round Table	22-Oct
Mark Vance	SAF Holland	Oxford Employers Round Table	22-Oct
N. Surridge	Oxford employer	Oxford Employers Round Table	22-Oct
Megan Porterm	Boston Pizza	Oxford Employers Round Table	22-Oct
Sharon Dykstra	Timberland	Oxford Employers Round Table	22-Oct
Participant	Organization	Meeting	Date
Cara Finn	Middlesex County	Middlesex Stakeholders	18-Nov
Carol Stewart	Employment Sector Council	Middlesex Stakeholders	18-Nov
Jeff Kinsella	OMAFRA	Middlesex Stakeholders	18-Nov
Pauline Andrew	Employment & Homelessness Middlesex County Social Services	Middlesex Stakeholders	18-Nov
Joe Winsor	City of London	Middlesex Stakeholders	18-Nov
Frances Shamley	EMO Workforce Planning and Development Board	Middlesex Stakeholders	18-Nov
Joanne Fuller	Community Employment Choices Middlesex	Middlesex Stakeholders	18-Nov
Tamara Kattari	Literacy Link South Central	Middlesex Stakeholders	18-Nov
Deb Mountenay	EMO Workforce Planning and Development Board	Middlesex Stakeholders	18-Nov
Name	Organization	Meeting	Date
Paul Shipway	Municipality of Bayham	Elgin Economic Recovery & Resiliency Committee	19-Nov
Mark Masseo	Elgin Business Resource Centre	Elgin Economic Recovery & Resiliency Committee	19-Nov
Tara McCaulley	Elgin/St. Thomas SBEC	Elgin Economic Recovery & Resiliency Committee	19-Nov
Alan Smith	County of Elgin	Elgin Economic Recovery & Resiliency Committee	19-Nov

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Laura Gibson	Ontario Ministry of Economic Development	Elgin Economic Recovery & Resiliency Committee	19-Nov
Kale Brown	Town of Aylmer	Elgin Economic Recovery & Resiliency Committee	19-Nov
Janice White	Libro Credit Union	Elgin Economic Recovery & Resiliency Committee	19-Nov
Nicole Pressey - Wiebenga	Aylmer & Area Chamber of Commerce	Elgin Economic Recovery & Resiliency Committee	19-Nov
Donald Leitch	Municipality of Central Elgin	Elgin Economic Recovery & Resiliency Committee	19-Nov
Heather Newton Derks	Earthmama Farms	Elgin Economic Recovery & Resiliency Committee	19-Nov
Debra Mountenay	EMO Workforce Planning and Development Board	Elgin Economic Recovery & Resiliency Committee	19-Nov
Participant	Organization	Meeting	Date
Lindsay Wilson	Community Futures	Oxford Services Stakeholders	03-Dec
Meredith Maywood	Oxford Tourism	Oxford Services Stakeholders	03-Dec
Kelly Gilson	United Way	Oxford Services Stakeholders	03-Dec
Dennis Guy	County of Oxford	Oxford Services Stakeholders	03-Dec
Ronda Stewart	Rural Economic Development EDO	Oxford Services Stakeholders	03-Dec
Curtis Tighe	Town of Ingersoll EDO	Oxford Services Stakeholders	03-Dec
Len Magyar	City of Woodstock EDO	Oxford Services Stakeholders	03-Dec
Julie Matheson	Community Employment Services Oxford	Oxford Services Stakeholders	03-Dec
Jeff Surridge	Community Employment Services Oxford	Oxford Services Stakeholders	03-Dec
Kathryn Leatherland	Tillsonburg Multi Service Center	Oxford Services Stakeholders	03-Dec

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Don McKay	Mayor of East Zorra, Tavistock	Oxford Services Stakeholders	03-Dec
Bryan Smit	Future Oxford	Oxford Services Stakeholders	03-Dec
Rick Cox	Future Oxford	Oxford Services Stakeholders	03-Dec
Karen Oldroyd	Settlement Services	Oxford Services Stakeholders	03-Dec
Natalie Surridge	Community Employment Services Oxford	Oxford Services Stakeholders	03-Dec
Organizers/Observers	Organization	Meeting	Date
Janet Neeb	MLTSD	Scenario Planning Steering Committee	21-Sep
Deb Mountenay	EMO Workforce Planning and Development Board	All	All
Tamara Kattari	Literacy Link South Central	All	All
Jacqueline Demendelev	EMO Workforce Planning and Development Board	All	All
Bashir Adeyemo	EMO Workforce Planning and Development Board	All	All
Trudy Button	Workforce Planning Windsor	Scenario Planning Steering Committee	19-Oct
Emilian Siman	EMO Workforce Planning and Development Board	All	All

Appendix 2

Factors affecting the Post COVID-19 economic recovery in the London Economic Region

Factor influencing post COVID-19 economic recovery	Measuring indicator	Degree of uncertainty
INTERNAL (Regional – London ER)		
1. The labour force structure (age, gender, education, immigration, visible minorities, entrepreneurship, etc.)	Percent age group per total labour force, percent males out of total labour force, etc.	Medium
2. The industry structure in the regional economy (goods-producing sector vs. services-producing sector, specific industry, etc.)	Percent industry GDP per total regional GDP Percent 3-digit NAICS group out of total labour force (or employed)	Medium-high
3. The occupational structure in the regional economy (specific occupational group)	Percent 3-digit NOC group out of total labour force (or employed)	Medium-high
4. The type and permanency of work (full-time vs. part-time, permanent vs. temporary, gig, etc.)	Percent full-time jobs out of total jobs Percent permanent jobs out of total jobs	Medium-high
5. The entrepreneurial ability of the region (self employment, number of business openings vs. closures vs. continuing, etc.)	Percent self employment out of the total employment, number of business openings per month/year, number of incubated businesses per year, number of \$ supporting start-ups in the region, etc.	Medium-high
6. Vulnerability of jobs/industries to COVID-19 effects	Percent of essential jobs/industries out of total jobs/industries Percent of working at home jobs/industries out of total jobs/industries Percent of jobs/industries requiring interaction with others out of total jobs/industries	Medium-high
7. Local infrastructure for unemployment support	Number of agencies, number of advisors, number of job developers, number of coaches, number of referrals, number of beneficiaries, etc.	Medium-high

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8. Degree of local cooperation (coordination) across regional unemployment support agencies	Number of coordinated actions (events, activities, etc.), percent of coordinated activities out of total activities, etc.	Medium-high
9. The amount of regional financial support for labour market recovery	Amount of \$	High
10. Changes in aggregate demand (consumer sentiment, property investment, preferences (travel, dining out, leisure activities, physical exercise, etc.),	Consumer Confidence Index, housing transfers and new starts, national and international flights, hotel occupancy, restaurant closures, gyms' closures, etc.)	High
11. Level of regional mobilization (leadership, management) toward economic recovery	Number of economic actions tried Number of rules and regulations changed and enforced	High
12. Ability of the regional and local government/community administration to enforce economic, business and behavioural rules for individuals	Number of successful actions of various nature but associated with COVID-19 (economic social, health, social distancing, etc.) implemented.	High
13. Regional business attraction (local legislation, availability of talent, real estate prices, transportation, location, regional natural resources and beauty, etc.)	Number of favourable points: Cheap land and rental properties Available talent Transportation, etc.	High
Factor influencing post COVID-19 economic recovery	Measuring indicator	Degree of uncertainty
EXTERNAL (out of region)		
1. Progression of COVID-19 virus (degree of work safety, severity of social distancing required, discovery of a vaccine, new treatments for the illness, etc.)	Number of new cases, rate of spread, speed (change) of infection's spread, etc.	High
2. Government support (wage subsidy, rent subsidy, EI – CERB support, training, placements, etc.)	Amount of \$, number of actions, number of beneficiaries, etc.	High
3. Businesses behaviour (closures vs. openings, investment (sentiment), business opportunities, etc.)	Percent business closures out of total businesses Business Confidence Index, amount of investment, unmet demand of medical supplies, etc.	High
4. Economic recovery of Canada's major trade partners (US, Europe (UK,	GDP growth, amount of trade (exports and imports), COVID new cases, etc.	High

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Germany, France, etc.), China, South Korea, etc.)		
5. Economic growth of Canada and Ontario (GDP, employment, prices)	GDP growth Employment growth Inflation	High
6. Oil prices (Canada's economy is dependent on energy products and services)	Oil price	High
7. Technological progress (AI transfer, automation, etc.) – speed of transformation	Number of business in the process of AI adoption, Level of automation across businesses in the region, etc.	Medium-high
8. Severity of restrictions on labour force mobility (interprovincial and international)	Border closures Interprovincial travel restrictions	High
9. Efficiency and effectiveness of online education (standardized tests, new standards for assessments,	Standardized tests averages' yearly comparisons	Medium-high
10. Willingness for international economic collaboration and cooperation (US-China relations, WTO, IMF, etc.)	Amount of \$ in economic aid to countries unable to contain COVID-19 on their own	High
11. Foreign investment in Canada/Ontario	Foreign investment in \$	High