



THE REGIONAL MUNICIPALITY OF NIAGARA
PLANNING & ECONOMIC DEVELOPMENT COMMITTEE
AGENDA

PEDC 4-2021

Wednesday, April 14, 2021

1:00 p.m.

Meeting will be held by electronic participation only

This electronic meeting can be viewed on Niagara Region's Website at:

<https://www.niagararegion.ca/government/council/>

Due to efforts to contain the spread of COVID-19 and to protect all individuals, the Council Chamber at Regional Headquarters will not be open to the public to attend Committee meetings until further notice. To view live stream meeting proceedings, visit:
[niagararegion.ca/government/council](https://www.niagararegion.ca/government/council/)

	Pages
1. <u>CALL TO ORDER</u>	
2. <u>DISCLOSURES OF PECUNIARY INTEREST</u>	
3. <u>PRESENTATIONS</u>	
3.1. <u>Insights on Proposed Pillar Statements and Directives - Niagara Official Plan</u> Rob Horne, Senior Advisor, Overlap Associates	3 - 12
4. <u>DELEGATIONS</u>	
5. <u>ITEMS FOR CONSIDERATION</u>	
5.1. <u>PDS 22-2021</u> Acquisition of Eco-Park lands - Glendale District Plan	13 - 23
5.2. <u>PDS 19-2021</u> Combined Sewer Overflow (CSO) Control and Wet Weather Management (WWM) Program – 2021 Funding Recommendations	24 - 34

6. CONSENT ITEMS FOR INFORMATION

- | | | |
|------|--|-----------|
| 6.1. | <u>ED 8-2021</u>
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| 6.2. | <u>PDS-C 28-2021</u>
COVID-19 Response and Business Continuity in Planning and Development Services | 40 - 44 |
| 6.3. | <u>ED 9-2021</u>
Niagara Economic Update

A presentation will precede discussion of this item. | 45 - 89 |
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Students Going Digital: The Economic Impact on Niagara

A presentation will precede discussion of this item. | 90 - 126 |
| 6.5. | <u>PDS 20-2021</u>
2020 Reserve Water and Wastewater Treatment Capacities (and BE CIRCULATED to the Ministry of the Environment, Conservation and Parks and Local Area Municipalities) | 127 - 136 |
| 6.6. | <u>PDS 21-2021</u>
Airport Master Plan Update (and BE CIRCULATED to the Niagara Central Dorothy Rungeling Airport Commission and Niagara District Airport Commission) | 137 - 140 |
| 6.7. | <u>PDS-C 29-2021</u>
Niagara 2051 Project – Water & WasteWater Master Servicing Plan Update – Public Information Center Number 1 | 141 - 144 |

7. OTHER BUSINESS

8. NEXT MEETING

The next meeting will be held on Wednesday, May 12, 2021 at 1:00 p.m.

9. ADJOURNMENT

If you require any accommodations for a disability in order to attend or participate in meetings or events, please contact the Accessibility Advisor at 905-980-6000 ext. 3252 (office), 289-929-8376 (cellphone) or accessibility@niagararegion.ca (email).

Insights on Proposed Pillar Statements and Directives – Niagara Official Plan

Planning and Economic Development Committee

April 14, 2021

Rob Horne, Overlap Associates Consultant

Pillars and Directives Insights Report

Region of Niagara

Rob Horne, M.A., R.P.P.
Municipal Innovation Group
Overlap Associates

- Overview of our work
- Part 2 Assignment
- What Regional Councillors received
- What we heard
- What we concluded
- Q & A

Overview of our Work with the Region of Niagara

Part 1 – Engagement Insights Report

- 7 Insights, 10 Recommendations
- Tabled December 10, 2020

Part 2 – Proposed Pillars and Directives Insights Report

- 6 Insights, 4 Conclusions
- Report now tabled with Regional staff, and the basis of this presentation.

Part 2 Assignment to Overlap

- Review of summary public input, including most recent survey (closed in January 2021).
- Design and deliver a feedback tool for Regional Councillors to be able to read summary results and provide their reflections.
- Derive insights and conclusions based on the Regional Councillor feedback.

What Regional Councillors received:

- An electronic questionnaire with a seven day period to respond (extended to nine days).
- Draft Pillars and Directives were included.
- Extensive summary information on the most recent and past public surveys was included.
- Questions were posed to Councillors regarding:
 - Impressions of public survey feedback
 - Any additional constituent comments from their interaction
 - What the Pillars and Directives mean to them
 - Anything else they wished to add

What we heard:

Insight 1 – Public was generally aligned with draft Pillars and Directives.

Insight 2 – Councillors generally confirmed a match between survey results and what other constituents were saying.

Insight 3 – Finding resolution between competing priorities is crucial.

What we heard:

Insight 4 – Pillars and Directives should be used as the basis for preparing a new Plan.

Insight 5 – This is a pivotal time for “future planning” in the Region.

Insight 6 – There is a need for creativity, collaboration and new approaches to working together, using “Made in Niagara” thinking.

What we concluded:

1. General alignment of Pillars and Directives with public input, recognizing that they may compete, and the Plan must provide policy details to support their resolution.
2. Next steps in the process should be the release of other key policy elements, and then a draft Plan for public review.
3. Active collaboration between all (thirteen) Municipalities is essential to ensure a clear understanding of the Plan and consistent application of its' content (including use of Area Municipal tools like Zoning By-laws and Site Plan Control).
4. Need for a well-designed Communication Plan to help the public read and understand the proposed Plan.

Thank you for this opportunity!

Subject: Acquisition of Eco-Park lands - Glendale District Plan

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 14, 2021

Recommendations

1. That Regional Council **BE DIRECTED** to send the letters, attached as Appendix I to Report PDS 22-2021, to the Federal Minister of Transport and the Provincial Minister of Transportation, respectively.
2. That the attached letters also **BE CIRCULATED** to the Niagara Members of Parliament, Members of Provincial Parliament, the Niagara Peninsula Conservation Authority, the St. Lawrence Seaway Management Corporation, Town of Niagara-on-the-Lake, and the City of St. Catharines.

Key Facts

- The purpose of this report is to outline considerations for securing lands in pursuit of an Eco Park as envisioned in the recently endorsed Glendale District Plan.
- The Eco Park is proposed for 70 hectares (172 acres) located outside of the Glendale settlement area boundary. The current ownership of the lands lies with Transport Canada (46 hectares) and the Ontario Ministry of Transportation (24 hectares).
- Niagara has an identified shortage of large parks, with a recent study indicating it has the second lowest amount of parkland space per resident in the Greater Golden Horseshoe.
- Staff have undertaken preliminary discussions on the Eco Park and the positions set out in this Report are supported by NPCA and Town Staff in Niagara-on-the Lake. In addition, the park concept was subject to the larger Glendale District Plan consultation process and received support from the community.
- Staff are seeking Council endorsement and direction to determine if the lands can be leased or sold at a nominal amount to the Region, NPCA or Town. Two letters, attached as Appendix I, have been prepared to formally make this request.

Financial Considerations

There are no financial considerations at this time. The feedback received from the Federal Government and Province will help establish financial considerations. A future report will provide these details, if applicable.

Analysis

The Glendale District Plan is a Council-endorsed proactive development strategy which supports growth and economic prosperity. It establishes the long-term commitment to Glendale becoming a mixed use, vibrant and complete community where residents can meet their daily living needs.

Through the District Plan process, the Region, in collaboration with the Town of Niagara-on-the-Lake (NOTL) and the City of St. Catharines, identified the subject lands for a future Eco Park. The Eco Park is approximately 70 hectares (172 acres) located outside of the Glendale settlement area boundary. The current ownership of the lands lies with Transport Canada (46 hectares) and the Ontario Ministry of Transportation (24 hectares).

The District Plan identified 9 key directions for achieving the vision of a complete Glendale community. The establishment of the Eco Park would directly contribute to 3 of these directions: the protection and enhancement of natural features, the addition of trails and active transportation connections and the creation of public/civic space.

Through numerous consultation activities with both stakeholders and the public, there was support expressed for the inclusion of the Eco Park. The desire to enhance and provide connection to this natural area was echoed throughout the District Plan process.

In addition to being located in the Glendale district, the lands identified for the Eco Park are within the Greenbelt Plan area. The Greenbelt designation permits passive parkland or agricultural uses.

Unlike other Greenbelt lands north of the QEW highway, the Eco Park site contains a mix of soil, including a significant amount of fill that was placed on the site when the current Welland Canal was excavated. In addition, the site contains significant woodlands that are part of the Greenbelt Natural Heritage System.

Due to the Greenbelt and natural heritage constraints noted above, the District Plan's recommendation for the Eco Park is to undertake additional consultation with the owners, local municipality and the NPCA to advance the initiative described in this Report. Through this consultation, the Region and agencies will determine the opportunities for recreational uses, a trail system, agriculturally-supportive uses or other uses deemed appropriate.

State of Large Parks in Ontario

Notwithstanding some prized parkland in Niagara, such as Short Hills Provincial Park and the Niagara Parks Commission's holdings, a 2019 report undertaken by the Toronto Region Conservation Authority and Credit Valley Conservation Authority titled The State of Large Parks in Ontario's Golden Horseshoe¹ set out that Niagara ranked second lowest (behind Toronto) compared to the 7 Greater Golden Horseshoe municipalities in parkland space per resident.

Ontario's *Growth Plan* states that municipalities should be planning for complete communities with convenient access to "an appropriate supply of safe, publicly accessible open spaces, parks, trails, and other recreational facilities". However, in Niagara, acquisition of sites for large parks has been challenging due to factors such as land prices and land acquisition funds.

The Covid-19 Pandemic has illustrated the value and demand for parkland in Niagara. Currently, Niagara has approximately 3 hectares of parkland per 1000 residents. If no new parkland is added in Niagara, that number is expected to drop to approximately 2 hectares of parkland per 1000 residents by 2041. In comparison, Halton Region has approximately 8 hectares of parkland per 1000 residents, and the City of Hamilton has 6 hectares of parkland per 1000 resident.

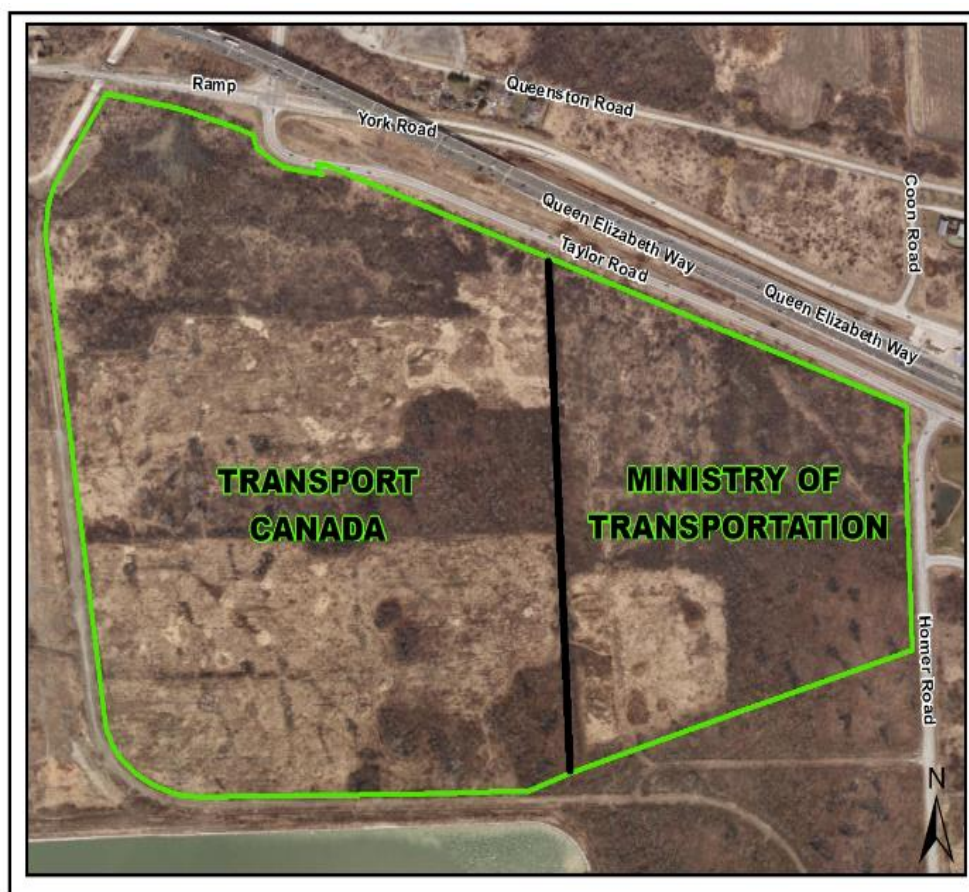
This report further identifies the opportunity to market large parks for tourism. The Eco Park can contribute to the range of offerings already available in Glendale and provide additional options to attract visitors to Glendale and the Region.

¹ https://greeninfrastructureontario.org/app/uploads/2019/06/StateofParks_Report-Final.pdf

Surplus Lands

Transport Canada has shared a list of properties they wish to divest with Regional Staff. These properties were previously under the portfolio of the St. Lawrence Seaway Management Corporation (SLSMC) and were declared surplus to Welland Canal needs.

One of the Transport Canada parcels (identified as NN-026-C by the Federal Government) is located within the area for the proposed Eco Park. The parcel is approximately 46 hectares in size, is vacant, and contains a mix wooded areas and meadow. The Eco Park is shown in a green outline, with land ownership noted, on the map below.



The Region indicated interest in Transport Canada parcel as it aligns with the work and vision of the Glendale District Plan. Transport Canada has established a market value price of \$3 million for their land. However, Regional Staff have noted several inaccuracies in establishing that market value.

To support the Region's interest in this property, two attached letters (Appendix I) have been prepared for circulation to the respective Federal and Provincial agencies. The purpose of the attached letters is to highlight the Eco Park concept and to request consideration for lease or a nominal sum purchase of the Transport Canada site.

Consultation

As noted earlier in this report, the Eco Park concept was well-received by the community through the District Plan consultation process. Through this process, the Region also engaged the St. Lawrence Seaway Authority to discuss preliminary details for this area.

Regional staff approached and had general discussions with the NPCA, Town Staff in Niagara-on-the-Lake, and the Greenbelt Foundation. The Eco Park concept has received positive support and the Region will continue to build on these discussions as this project moves forward to ascertain partnerships and ongoing stewardship.

Conclusion

Niagara is in need of additional large park space.

Due to its Greenbelt designation and existing natural heritage features, the lands described in this Report are well-positioned to create passive recreational opportunities, while allowing for habitat enhancement.

An Eco Park will add value to the community by supporting the connection to nature, offering opportunities that will contribute to improved physical and mental health for residents and visitors.

The acquisition of the land for the Eco Park would be quick win for the Glendale District Plan.

Alternatives Reviewed

Council could choose not to send the letter attached in Appendix I and direct staff to work through the Real Estate process to purchase the lands. This alternative would result in a future report outlining the details of the appraisal process and the financial implications of acquiring the lands.

Relationship to Council Strategic Priorities

The development of an Eco Park, regardless of who owns and operates it, contributes to Council's Strategic Priority of creating Healthy and Vibrant Communities.

Other Pertinent Reports

PDS 27-2020 Endorsement of the Glendale District Plan

PDS 5-2021 Recommendation Report for Regional Official Plan Amendment 17 –
Glendale District Plan

Prepared by:

Kirsten McCauley, MCIP, RPP
Acting Manager, Long Range Planning
Planning and Development Services

Recommended by:

Doug Giles, MES, BUP
Acting Commissioner
Planning and Development Services

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was jointly prepared by Erik Acs, Manager of Community Planning, and reviewed by Isaiah Banach, Acting Director of Community and Long Range Planning.

Appendices

- Appendix 1 Letter to the Federal Ministers of Transportation, Public Services & Procurement, and the Provincial Minister of Transportation
- Appendix 2 Glendale District Plan Demonstration Plan and Key Directions

Delivered Electronically

April 14, 2021

Hon. Omar Alhabra
Minister of Transport
House of Commons
Ottawa, Ontario,
Canada
K1A 0A6

Hon. Omar Alhabra,

RE: Transport Canada Surplus Lands in Niagara on the Lake Ontario

The Niagara Region is the home of the Welland Canal, an important marine transportation corridor. Niagara is also home to a growing population, expected to reach 675,000 in the next 30 years.

Niagara Region Council has prioritized the establishment of healthy and vibrant communities which foster a high quality of life through safe, healthy, and inclusive neighbourhoods. To this end, I am reaching out to share the Region's vision for the establishment of an Eco Park in the Glendale District of Niagara on the Lake.

The Glendale District is a strategic growth area located alongside the Welland Canal. The District was envisioned through a collaborative community consultation process which included participation from the St. Lawrence Seaway Management Corporation (SLSMC).

The District envisions a passive Eco Park that will provide natural space for Niagara's growing population. The park will enhance existing natural environment features located on lands immediately adjacent to the Welland Canal.

Transport Canada is currently in the process of divesting a site (NN-026-C) which was formerly under the jurisdiction of the SLSMC. While we understand Transport Canada has established a market value asking price for the site, we are hopeful you will consider alternatives that will allow us to preserve and enhance this unique site while making it available as passive park space.

The Niagara Region has several existing long-term lease agreements for recreational trails with the Federal Government for lands alongside the Welland Canal. We would be interested in a similar arrangement for site NN-026-C. Alternatively, we would consider a nominal sum purchase of the site.

We're excited about the opportunity to preserve and enhance these lands through the establishment of a passive Eco Park. We hope Transport Canada shares our vision and value for this project.

If your Office would like additional information about the project or Transport Canada site, please feel free to contact myself or Erik Acs, Manager of Community Planning
Erik.Acs@niagararegion.ca.

Sincerely,

<name>

<title>

Cc:

Hon. Chris Bittle MP St. Catharines
Hon. Vance Badaway MP Niagara Centre
Hon. Tony Baldinelli MP Niagara Falls
Hon. Dean Allison MP Niagara West

Delivered Electronically

April 14, 2021

Hon. Caroline Mulroney
Minister of Transportation of Ontario
5th Floor, 777 Bay St,
Toronto, ON
M7A 1Z8

Hon. Caroline Mulroney,

RE: Vacant MTO Lands in Niagara on the Lake

On behalf of the Niagara Region Council, I wanted to extend my thanks to the Ontario Ministry of Transportation (MTO) for their participating in the Glendale District Planning process. The Glendale District will soon be home to Ontario's first diverging diamond interchange.

The Glendale District is a strategic growth area designed to accommodate a significant amount of Niagara's growth over the next 30 years.

Niagara Region Council has prioritized the establishment of healthy and vibrant communities which foster a high quality of life through safe, healthy, and inclusive neighbourhoods. To this end, I am reaching out to share the Region's vision for the establishment of an Eco Park in the Glendale District of Niagara on the Lake.

The District envisions a passive Eco Park that will provide natural space for Niagara's growing population. The park will enhance existing natural environment features located on lands adjacent to the Welland Canal and Queen Elizabeth Way. A portion of the Eco Park site identifies the potential use of a large parcel owned by the Ministry of Transportation.

The MTO retains historical ownership of an approximate 24 hectare parcel at the corner of Homer and Taylor Roads in Niagara on the Lake. We are hoping your Ministry could review its land needs and consider leasing us all or a portion of this site for parkland use, either for the long term or until the MTO requires the site for its own purposes.

If this site is surplus to MTO needs, the Region would like to discuss opportunities for a long term lease or purchase.

We're excited about the opportunity to preserve and enhance these lands through the establishment of a passive Eco Park. We hope your Ministry shares our vision and value for this project.

If your Office would like additional information about the project or the MTO lands in question, please feel free to contact myself or Erik Acs, Manager of Community Planning Erik.Acs@niagararegion.ca.

Sincerely,

<name>

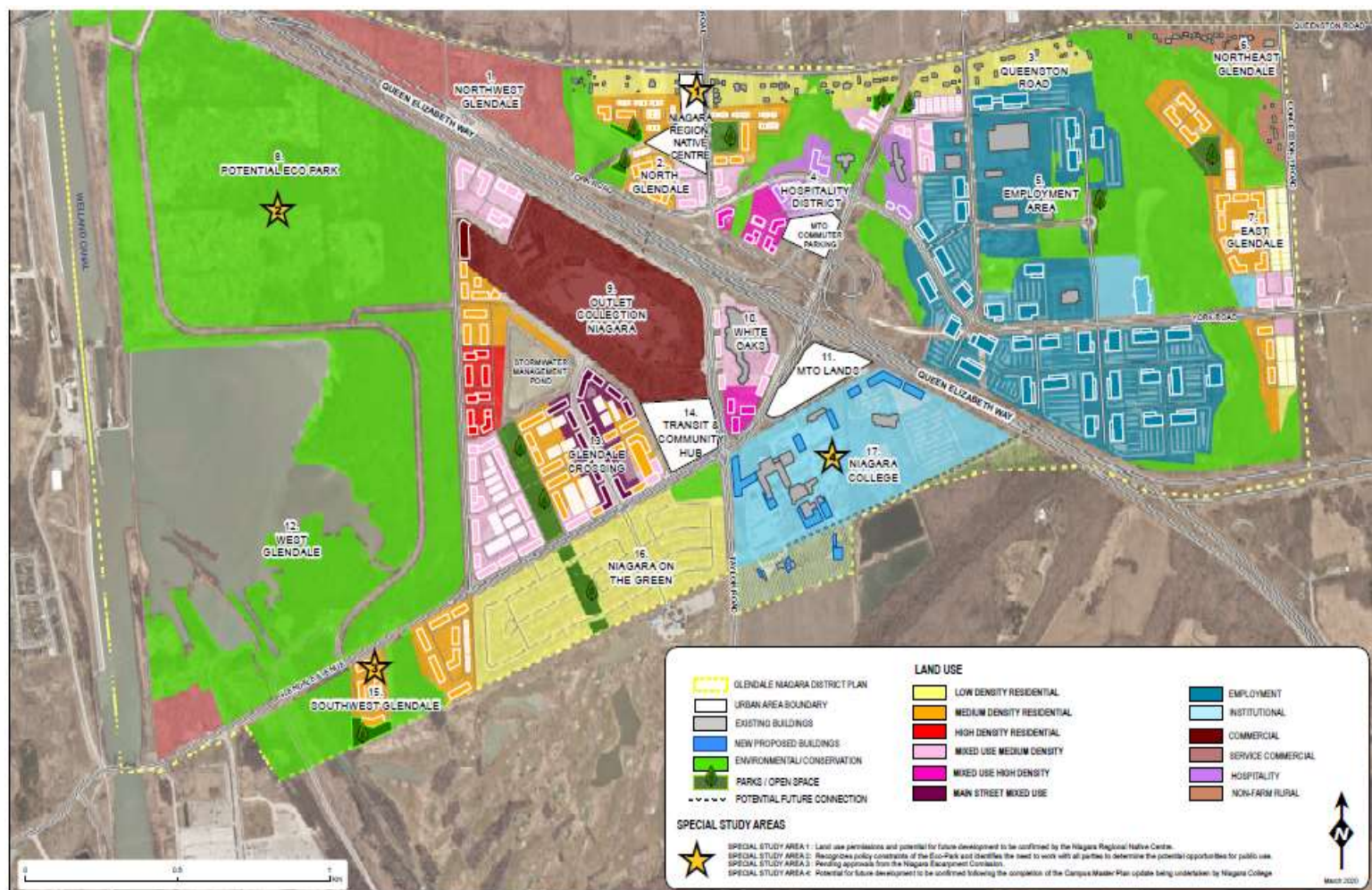
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Cc:

Hon. Wayne Gates

Glendale District Plan Demonstration Plan and Key Directions

- 1: Protect/enhance natural features**
- 2: Trails and active transportation**
- 3: Connected transit system**
- 4: Build on existing assets**
- 5: Create a “main street”**
- 6: Diverse range of housing**
- 7: Create public/civic space**
- 8: Use sustainability measures**
- 9: Coordination of infrastructure**



Subject: Combined Sewer Overflow (CSO) Control and Wet Weather Management (WWM) Program – 2021 Funding Recommendations

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 14, 2021

Recommendations

1. That the thirty-four (34) Local Area Municipal projects under the 2021 Combined Sewer Overflow (CSO) Control / Wet Weather Management (WWM) Cost Sharing Program, as identified in Appendix 1 of Report PDS 19-2021, **BE APPROVED** in the amount of \$3,252,976;
2. That Regional staff **PREPARE AND EXECUTE** the respective partnership funding agreements with the Local Area Municipalities (LAM) for qualifying projects to reflect the terms and conditions set out in Appendix 2 and Appendix 3 of Report PDS 19-2021; and
3. That the local Municipal partners **BE ADVISED** of the results of Regional funding support, as outlined in Appendix 1 of PDS 19-2021.

Key Facts

- The purpose of this report is to provide background information to support the approval of the 2021 Local Area Municipal projects under the CSO Control / WWM Program.
- The Combined Sewer Overflow (CSO) Control Cost Share Program has been in place since 2007 and is intended to facilitate shared funding with the local Municipal partners to help mitigate the impacts of wet weather events on the Region-wide sanitary system and the environment. As a result, the Region benefits from this program by gaining capacity at regionally owned trunks, sewage pump stations and wastewater treatment plants, which in return, could be used for growth without oversizing Regional infrastructure.
- Representatives of the CSO/WWM Working Group developed administrative procedures and criteria to support this Program and to rank project submissions by local Municipalities in accordance with the guiding principles.

- The Region supports this approach and has included funding annually in its budget. For 2021, an amount of \$4,000,000 was budgeted in the Region's Wastewater Operating Budget.
- The total of eligible projects submitted by local Municipal partners for 2021 was \$3,252,976.
- Although the total requested amount is less than the approved program budget of \$4,000,000 by \$747,024 for 2021, the need to address wet weather issues in sanitary collection systems remains high.

Financial Considerations

A gross budget of \$4,000,000 has been approved as part of the 2021 Wastewater Operating Budget for the CSO Control Cost Share program. Funding for this program is partially provided through the Development Charges (50%).

The thirty-four (34) eligible projects considered for funding under the 2021 CSO Control Program totaled \$3,252,976. As the total requested amount is less than the approved program budget of \$4,000,000 by \$747,024 for 2021, these existing funds will remain available for the remainder of 2021 in order to accommodate any unforeseen or not yet approved projects requested by LAM. If the funds are still unused by year-end, the 50% funded by DC revenues (\$373,512) will remain unrecognized and the 50% funded through the water wastewater requisition (\$373,512) will be recognized as surplus through the 2021 financial reporting process. Appendix 1 presents thirty-four (34) municipal projects being recommended for funding in full.

Included in the recommended projects list is a \$15,000 support contribution for the Guidelines to Undertaking Flow Monitoring in New Construction for the reduction of I/I. This project is directly aligned with the WWM strategic approach benefiting both, Region and LAM. In support of this work, each municipality signed a written consent agreeing that the contribution be taken from the CSO Control Funding Program. This agreement was confirmed again for 2021 by the Working Group.

During mid-2021, Regional staff in collaboration with the local Municipal partners, will review the approved local budgets for the CSO related projects. This will insure that a consideration is given for a potential acceptance of the in-year applications should the increase in demand continue.

In addition to the \$4,000,000 approved in the 2021 Wastewater Operating Budget, there are currently \$22,105,628 of previously approved and active CSO projects at December

31, 2020. Of that amount, \$8,672,415 has been paid to Local Area Municipalities at December 31, 2020 for qualifying CSO projects. As a result, there are \$13,433,213 in commitments to 11 municipalities for approved but unspent CSO projects at December 31, 2020 as shown in Appendix 4.

Analysis

Thirty-four (34) applications were received from ten (10) local Municipalities. Five (5) applications from Fort Erie, one (1) from Grimsby, two (2) from Lincoln, eight (8) from Niagara Falls, two (2) from NOTL, one (1) from Pelham, three (3) from Port Colborne, three (3) from St. Catharines, eight (8) from Welland and one (1) from West Lincoln.

Regional staff reviewed and evaluated thirty-four (34) eligible projects and incorporated all of them into the final recommendation list presented in Appendix 1.

The requested funding for all qualified projects totaled \$3,252,976 including a \$15,000 support contribution to Municipal I/I Collective research project, which was endorsed by all local Municipal partners. The total requested funding of \$3,252,976 is \$747,024 less than the 2021 approved budget of \$4,000,000.

Previously the CSO Control Working Group adjusted the funding options structure for the eligible CSO cost share projects during 2018 and 2019. This adjustment incorporated a weighted approach of a growth component into the evaluation matrix and a change of funding priorities for different types of work. Appendix 2 shows the Funding Options.

Local Municipalities are encouraged to apply during 2021 for new eligible CSO projects as they are able to do so. Similar to other jurisdictions across Ontario, wet weather flows continue to negatively impact sanitary infrastructure resulting in potential basement flooding, overflows to the environment, and reduced capacity for future growth. The removal of wet weather flow and Inflow & Infiltration reduction is important work that needs on-going focus and support over the long term to be successful.

Alternatives Reviewed

No alternatives were reviewed at this time.

Relationship to Council Strategic Priorities

This report was brought forward by Regional Staff, supported by the CSO/WWM Working Group and by the Public Works Officials as the Responsible Growth and Infrastructure Planning priority in establishing objectives of Environmental Sustainability & Stewardship and Maintenance of Existing Infrastructure.

Other Pertinent Reports

- PW4.S06.0, September 2, 2014 – Combined Sewer Overflow (CSO) Control & Wet Weather Management Policy
- PDS 12-2020, April 8, 2020 – Combined Sewer Overflow (CSO) Control and Wet Weather Management Program – 2020 Funding Recommendations”)

Prepared by:

Ilija Stetic, B.Sc., PMP, CET
Project Manager
Planning and Economic Development

Recommended by:

Doug Giles, MES, BUP
Commissioner (Acting)
Planning and Economic Development

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Phill Lambert, P. Eng., Director, Infrastructure Planning & Engineering, Lyndsey Ferrell, Program Financial Specialist, and reviewed by Dan Ane, Manager Program Financial Support.

Appendices

Appendix 1	Recommended 2021 CSO Control Program Funding Requests
Appendix 2	Funding Options
Appendix 3	CSO Control / WWM Policy Funding Conditions

Appendix 4 Summary of CSO Project Remaining Budget Encumbrance by
Municipality by 2020 Year-End

Appendix 1: Recommended 2021 CSO Control Program Funding Requests

Municipality	Project Title	Regional	Requested	Recommended
		Share	Funding	Funding
		%	\$	\$
Grimsby	Investigative Work in the Roberts Rd. and Lake St. SPS Catchments	50	43,393	43,393
Fort Erie	Flow Monitoring Pre/Post - Targeted Areas	50	15,000	15,000
	Sanitary CCTV - Targeted Areas	50	157,500	157,500
	Thunder Bay Trenchless Sewer Rehabilitation (TBTR19)	30	75,000	75,000
	Trenchless Repairs - Targeted Area (TRSA21)	30/60 ¹	162,000	162,000
	Catherine SPS I/I Reduction	30	12,857	12,857
Lincoln	Glenbrook Dr Sewer Replacement (D & C)	30/30/60 ¹	257,400	257,400
	Beamsville, Vineland, Jordan: Sewer Rehab Project (D & C and post F/M)	30/30/60 ¹	284,970	284,970
Niagara Falls	Corwin Area Sewer Separation Implementation Plan (Study)	50	50,000	50,000
	Dixon St Sewer Separation (Design)	40	17,316	17,316
	George St/ Fraser St Sewer Separation EA (Study)	50	50,000	50,000
	Hodgson Subdivision Sewer Separation Strategy (Study)	50	50,000	50,000
	Sanitary Sewer Rehabilitations Project Yr 2	30	300,000	300,000
	South NF I&I Remedial Program Ph 2	60/30 ¹	135,000	135,000
	St. Peter Ave Sewer Separation (Construction)	40	122,400	122,400
	Valley Way Area Sewer Separation (Study)	50	50,000	50,000
Niagara-on-the-Lake	Mississauga Beach Study	50	75,000	75,000
	Dorchester North Repairs	30	45,000	45,000
Pelham	Sanitary I&I Study Program- Planned Replacements and Rehab	30	30,000	30,000
Port Colborne	Investigation of Innovative Stormwater Management Solutions-Omer Area	50/60 ¹	80,100	80,100
	Investigation & Remediation - I&I Contributors Omer Area	50/60 ¹	108,000	108,000
	Inflow and Infiltration Public Education Campaign	50	15,000	15,000
St. Catharines	Greenmeadow / Wood St Sewer Separation (Design)	50	142,000	142,000
	Carlton/Ontario Catchment Investigation and CSO Reduction Study	50	75,000	75,000
	Wastewater and Stormwater Model Development	50	90,000	90,000
Welland	Broadway Area I&I Reduction	50	75,000	75,000
	Merritt St Sewer Separation	40/60 ¹	104,160	104,160
	Commercial Ontario Area MSP Trunk Sewer	50/50/60 ¹	78,000	78,000
	Lincoln Conventry I&I Reduction	50	75,000	75,000
	Welland River Inflow & Check Valves	50/60 ¹	57,000	57,000
	Dain City I&I Reduction	30/50/50 ¹	220,000	220,000
	Parkdale Place Sewer Separation	40/60 ¹	41,680	41,680
	Margaret Nye Gadsby Sewer Separation	40/60 ¹	84,200	84,200
West Lincoln	I&I Study and Remedial Action Plan	30	60,000	60,000
Guideline to Undertaking Flow Monitoring in New Construction for I/I reduction ²		100	15,000	15,000
Total			3,252,976	3,252,976

Note 1: Funding % share is dependent on specific project component and related work. Projects combined different works resulting in different Regional share. See Appendix 3 for a specific project cost share split.

Note 2: This collective project is for the reduction of I/I in new construction for the benefit of both, Region and Municipal partners.

CSO Control Program Funding Options

Project Category No.	Project Types	100% Funding Amount Priorities	Region %	Municipality %
1.	Sewer Separation	40%		
Work Examples	Disconnection of road drainage		40	60
	Disconnection of private		60	40
	Disconnection of road, previous disconnection of private or opposite		50	50
2.	Studies	15%		
Work Examples	PPCP as per the PPCP guide		50	50
	I&I and extraneous flow investigation including cctv/smoke dye testing ¹		50	50
	Mandatory flow monitoring - pre and post		60	40
	Investigative work on municipal/private side		50	50
	Public education/water conservation and efficiency measures		50	50
	Sewer use by-law development/update and municipal policies		50	50
3.	Source Control - Private Side	20%		
Disconnection of roof leaders to be done by homeowners/municipalities as a prerequisite for other works on the private side.				
Work Examples	Disconnection of roof leaders		60	40
	Disconnection of weeping tiles from sanitary including applicable works		60	40
	Disconnection of private sump pumps		60	40
	Backflow preventer installation on sanitary		40	60
4.	Conveyance and Flow Control/Storage	15%		
Work Examples	Real time control for detention		60	40
	In-line flow controllers design and construction (e.g. weirs)		60	40
	Off-line conveyance and pumping design and construction		60	40
	In-line/ off-line storage		40	60
5.	Repair/ Rehabilitation/ Replacement of Sewers	10%		
Estimated ≥50% flow reduction during WW events				
Work Examples	Repair of sanitary/ manholes - gel sealing, spot repairs		30	70
	Spot repair lining		30	70
	Full length liner		30	70

Note 1: CCTV inspection - only site/project specific. Regular city wide inspections should be part of municipal O&M.

CSO Control Program Terms and Funding Conditions

The terms and conditions under which funding will be offered to the successful applications, include the following:	
1	<i>Amount of Funding, Studies</i> - The Region shall contribute 50% of total study costs for the PPCP and I&I studies, and 60% for the Pre and Post Flow monitoring projects provided the Region participates on a committee overseeing the study and the study covers the entire area tributary to the Wastewater Treatment Plant(s) and includes both local and Regional infrastructure.
2	<i>Amount of Funding, Design & Construction projects</i> – The Region shall contribute defined percentage of the cost based on the Funding Options matrix, provided that; the facility or measure is supported by a recommendation from a current CSO study, life cycle cost comparisons of alternative solutions were undertaken and the Region agrees with the cost comparisons, the Region agrees with the ‘best overall solution’, and the Region participates on a committee overseeing the design.
3	<i>Third Party Funding</i> – The Region’s funding shall be net of any third party funding approved for the project. If third party funding is obtained after Regional funding approval, the amount of Regional funding will be adjusted to be net of any third party funding. Payment of the funding to the Area Municipality shall be based on actual expenditures incurred up to the maximum amount approved by Regional Council based on the budget submitted with the application.
4	<i>Project Lead Studies</i> – Lead by either the Area Municipality or the Region based on a mutual agreement prior to initiation of study.
5	<i>Project Lead Design & Construction</i> – A project located in the Area Municipal wastewater system shall be managed by the Area Municipality while a project in the Regional wastewater system shall be managed by the Region. On a case-by-case basis the Region may consider managing a project in the local system, if requested by the Area Municipality.
6	<i>Ownership and Operation of Assets</i> – The ownership and operation of all new and existing assets shall remain the responsibility of the current owner. The Area Municipality, on a case by case basis, may request the Region to operate and maintain an existing or new CSO control facility on behalf of the Area Municipality on a direct charge back basis.
7	<i>Follow up Flow Monitoring</i> – On a case-by-case basis, the Region may include a condition or approval of funding that requires follow up flow monitoring to assess project’s effectiveness.
8	<i>Expiry of Funding</i> – Funding of a project by the Region may expire if the local Area Municipality does not invoice the Region within three (3) years of the date of funding approval by Regional Council. Also, if an Area Municipality decides not to proceed with a project, the Region may revoke funding. The Region may also withdraw funding for future phases if a project does not proceed on a continuous basis toward completion.
9	<i>Indemnity</i> – The Region, or its directors, officers, employees, agents or consultants will not be held liable as a result of providing funding for any project.
10	<i>Regional Recognition</i> – The Area Municipality is to ensure that the Region is to be acknowledged in all advertising and publicity related to the project for which funding was provided.

11	<i>Project Deliverables</i> – The Region shall receive copies of all project deliverables, including, but not limited to, reports, flow monitoring data, hydraulic modelling files, GIS layers/data, and technical memorandums.
12	<i>Funding Agreement</i> - A letter formalizing the funding in accordance with the Region's CSO Funding Policy will be issued to the Area Municipality for signature and used as the agreement to the terms and conditions of the funding.

Appendix 4: Summary of CSO Project Remaining Commitments by Municipality at 2020 Year-End

	Year						
Municipality	Pre-2016	2016	2017	2018	2019	2020	Grand Total
Fort Erie	\$ 8,729	\$ 123,301		\$ 308,990	\$ 783,839	\$ 138,500	\$ 1,363,359
Grimsby	1,503,293	13,521				288,000	1,804,814
I/I Collective Research					5,720	15,000	20,720
Lincoln		13,521	2,100	312,182	389,400		717,203
Niagara Falls	112,728	11,074	320,207	101,663	410,929	1,185,613	2,142,214
Niagara-on-the-Lake				115,292	52,000	100,286	267,578
Pelham	5,173			50,000	15,000		70,173
Port Colborne		186,460	98,684				285,144
St. Catharines	803,618	1,018,842	128,082	314,001	1,243,200	364,500	3,872,243
Thorold	158,050	176,277		299,465			633,792
Welland	148,980	62,000		876,659	528,765	448,000	2,064,404
West Lincoln		13,521				178,048	191,569
Grand Total	\$ 2,740,571	\$ 1,618,516	\$ 549,074	\$ 2,378,252	\$ 3,428,852	\$ 2,717,948	\$ 13,433,213

MEMORANDUM

ED 8 -2021

Subject: COVID-19 Response and Business Continuity in Economic Development

Date: April 14, 2021

To: Planning and Economic Development Committee

From: George Spezza, Director, Economic Development

Economic Development

Current Status of Operations

This memo is the Economic Development Division's monthly update on our response to COVID-19 and business continuity. We continue to lead the implementation of the Economic Recovery Plan in collaboration with the Economic Rapid Response Team (ERRT). However, in developing operational work plans for 2021 we are working on planning priority activities in preparation to return to our core mandate.

Service/Operational Changes

Economic Development currently has two positions posted. Our Manager, Trade and Investment, Tim Reynolds, is retiring and his last day was on March 31st. His position has been posted and we hope to have someone in place by the beginning of May. The Economic Development Officer position left vacant when Kelly Provost was appointed Director, Economic Development in Sarnia has also been posted. Linda Sicoli is currently backfilling the position on a one year contract. It is expected that position will be filled by the end of March.

Marketing Support to Businesses

Ongoing projects include Buy Local Area Municipality support, COVID-19 Business Support page updates, coordination of business resiliency stories. Preparation has commenced for the release of Niagara Business Directory to help mitigate the effects of COVID-19, and promote a Niagara supply chain. Niagara Economic Development has also been critical in supporting GNCC's International Women's Day event as well as a number of upcoming events throughout our business community.

Website Analytics:	Last 30 days:	Vs. Same time last year:
Visits	3,409	+629
Page views:	6,382	+536
Unique Visitors:	2,808	+578
Returning Visitors:	159	-15

Most popular Pages:	Number of Views:
Tourism	444
Our Team	260
Niagara Foreign Trade Zone	248
Regional Quick Facts	172

Business Updates/Economic Recovery Plan

Tourism Adaption and Recovery Funding

The successful uptake of this funding by tourism-dependent businesses has resulted in the full amount of funding being allocated. At the time of writing this report, businesses are being set up in our financial system so that 80% of their project funding can be transferred to support projects when the money is received from the funder. In total, 168 businesses received funding of between \$4,000 and \$20,000.

ERRT Biweekly Update Calls

Calls continue every two weeks to a large group of stakeholders who provide support to businesses including chambers, BIAs, industry associations, economic development offices and destination marketing organizations. At our meeting on March 10th, Dr. Hirji attended to answer questions directly from businesses.

Business and Economic Research and Analysis

Ongoing projects include: Niagara Active Economy research project with the Niagara Community Observatory; ICT Policy Brief, Niagara Community Observatory; Scenario Planning Prioritization Committee, Niagara Workforce Planning Board (drafting a report on Niagara for the Province that looks at potential scenarios and possible outcomes over the next 2 years); ERRT COVID-19 Business Impact Survey – Part 3 (currently in progress); Niagara Economic Update (April 2021), and FDI program research and analysis looking at Niagara's position in FDI and trade from a data perspective (April 2021).

Other projects include: Niagara Region COVID-19 Recovery Measurement Indicators (providing advice and information); Airport Economic Impact Assessment Project (providing advice and assistance), and Students going digital - the economic impact on Niagara (providing advice and assistance to Niagara Workforce Planning Board); and, updated Niagara Tourism Profile.

Business Development

As part of the on-going Grants and Incentives Review, Manager of Business Development in collaboration KPMG, has completed a review of the Region's current incentive programs and their alignment with our target incentive areas. This will be used to help inform the decision making process going forward.

Niagara Economic Development also received one Industrial Development Charge Grant application. This will result in the immediate retention of 90 existing jobs and the creation of 15 new jobs in the Niagara region.

Trade and Investment

Foreign Direct Investment (*FDI*) meetings are ongoing virtually, focused on the U.S. and EU markets. The U.K. lead generation contract, initiated a year ago, has been terminated due to the impact of both COVID-19 and Brexit. Three different lead generation consulting companies are working at the moment, one in the EU Market, and two in the U.S. Market, in an effort to provide pre-qualified leads. The work in the EU (expected to finish in the month of March) and the U.S. is going extremely well, with the exception of a contract the Hamilton-Niagara Partnership has for 15 leads in the State of Florida, where little progress has been made. Notably, we continue to find strong leads in the EU at the moment, with all 10 contracted lead meetings expected to be

completed by the end of March. The current status of Niagara Economic Development's (NED) lead generation work has the following outstanding qualified leads due: the U.S. with 48; and, the EU with 0. The *FDi* work which was placed on hold for 15 virtual qualified lead meetings with the Hamilton Niagara Partnership in the State of Florida for the December-January period, has now been relaunched, with meetings still anticipated in March. Concurrently, the NED *FDi* team are continuing to work closely with two Ontario ministries (OMAFRA and MEDJC&T) and the applicable Niagara Local Area Municipality Economic Development Officer's in each case to nurture four very strong leads, 4 from the U.S. and one from the EU, to facilitate their respective goals to locate in the Niagara Region – challenging work during our current COVID-19 lockdown.

As a part of the ERRT Economic Recovery Plan, the DISCORD App (first mentioned in the February report to PEDC), utilizing the Niagara Industrial Association as the platform host, has been launched to address the supply chain issues of Niagara's 650 manufacturers. It is anticipated this App will enhance our themes of "localization" and "connectivity" among Niagara's manufacturers, with this virtual drop-in centre.

The Niagara Foreign Trade Zone Point continued to be active in March, with 5 inquiries from exporters and 3 meetings with CanadaBW utilized as a valuable expert resource, to address queries about bonded warehousing from foreign companies.

Sector Support and Economic Development Support to Local Area Municipalities without Economic Development resources

- General LAM advisory support for businesses and development initiatives;
- Project management support and business/EDO/FedDev engagement & response for Tourism Adaptation Recovery Fund;
- Presentation to West Lincoln Chamber on Economic Development activities in the municipality;
- Business Advisory Task Force for Niagara-on-the-Lake;
- Greater Niagara Circle Route Committee liaison to engage Economic Development for support of tourism enhancement elements;
- EDO collaboration in preparation for West Niagara Town Hall;
- Engagement with wineries stakeholders to determine opportunities for collaboration/support;
- ConnectON meetings;
- Airport Business scenarios meeting;
- Local Food conference sessions (every Wednesday in March through OMAFRA).

Operational Outlook

1 month

- Initial grant payments made to Tourism Adaption and Recovery Fund applicants. Project reporting ongoing.
- COVID-19 third Business Impact Survey released.
- Online regional Business Directory is 'live' and being promoted to businesses and organizations.
- Implementation of Economic Recovery Plan on-going.
- Review work practices depending on Niagara Region recommendations and Public Health advice.

3 months

- Implementation of Economic Recovery Plan completed.
- Initial work started on development of a 10 year Economic Development Strategy.
- Continue to monitor economic indicators to better understand the impact of COVID-19 on the local economy compared to previous years and determine where resources could be best utilized to maximize ongoing economic development programming.

6 months

- Longer term strategic economic development planning underway.
- Review work practices depending on Niagara Region recommendations and Public Health advice.

Respectfully submitted and signed by

George Spezza, Ec.D., CEcD
Director, Economic Development

MEMORANDUM

PDS-C 28-2021

Subject: COVID-19 Response and Business Continuity – Planning and Development Services

Date: April 14, 2021

To: Planning and Economic Development Committee

From: Doug Giles, Acting Commissioner, Planning and Development Services

Community and Long Range Planning

Current Status of Operations

On previous occasions, Staff have reported on a “Joint Report”, which will cover all Official Plan matters.

That Report is proceeding at the next PEDC meeting, on May 12. Previously, we advised that this would proceed in April; however, this was moved to the following meeting to allow additional time for public review of Natural Heritage System (NHS) materials.

This is the department’s largest project and is proceeding in a work-from-home setting with regular group meetings. Without a modern Official Plan, the Region is at a competitive disadvantage to other municipalities in the Greater Toronto Area.

In addition to the aforementioned NHS materials, the Joint Report will provide information on the Regions’ land needs assessment (i.e. population and employment forecasts) and other matters. Draft Official Plan policies will be provided for many sections. In the months that follow, the Region will seek feedback on these matters from the public, LAMs, and interests’ groups.

In March and April, Regional staff hosted individual meetings with local Planning Directors and local Councilors. The purpose of those meetings was to provide a preview of key matters that will arise in the Joint Report and to get initial feedback. There will be ongoing opportunities for public feedback on Official Plan matters, particularly since the

May Joint Report material is being provided for information only (except as it relates to the NHS).

A tremendous amount of work has gone in to preparing the Joint Report so that it can be shared and considered for feedback. Other than natural heritage system options, staff will ask for the Joint Report materials be received by Council. No decisions will be sought. This is to allow the information to be circulated for ongoing consultation, followed by further reporting in summer and fall 2021.

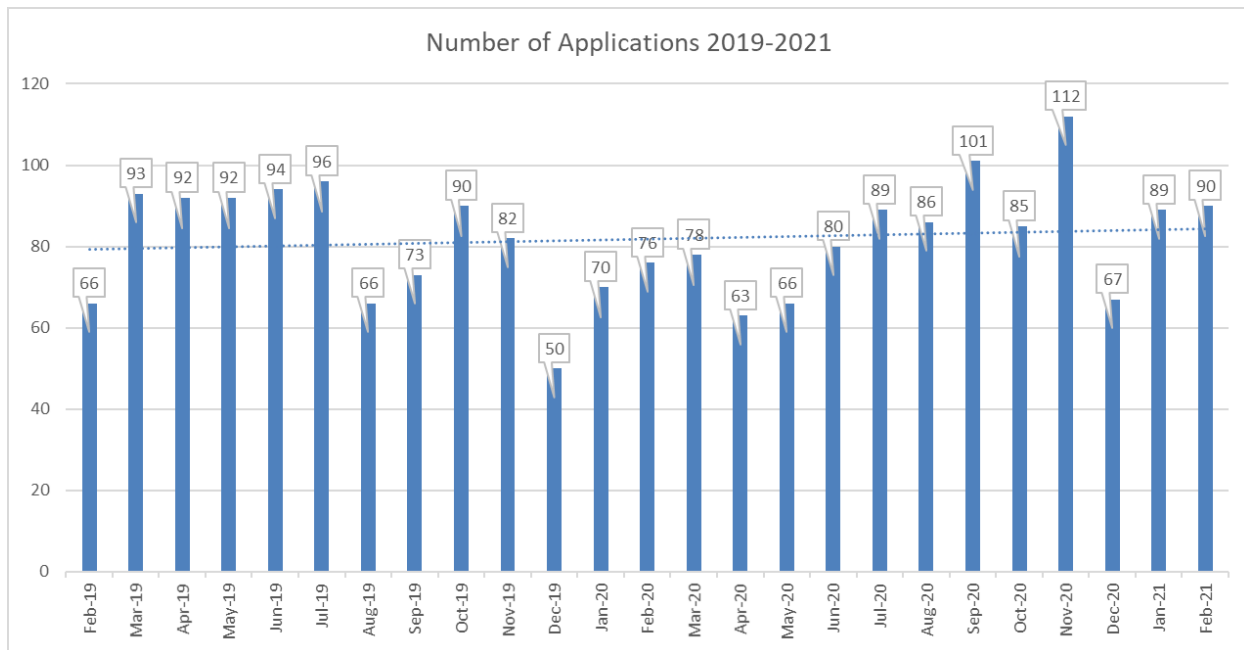
Development Planning & Approval Services

Current Status of Operations

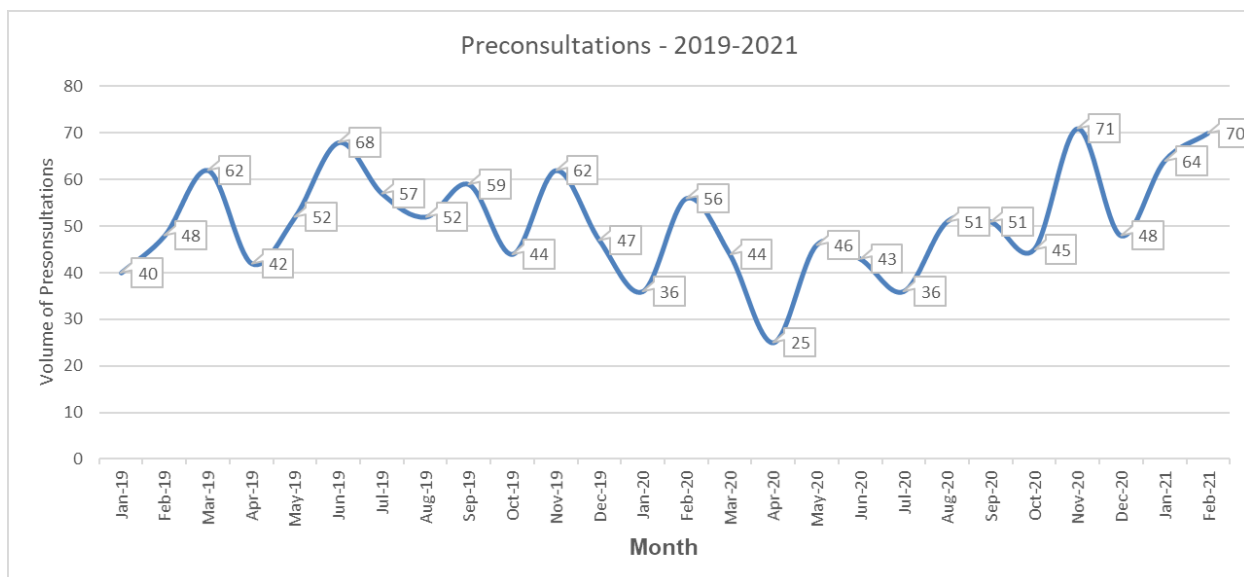
Development Planning & Approval Services continues to adapt to ensure the delivery of core development review functions including: review and comment on all development applications from a Provincial and Regional perspective, coordinating and analyzing internal review/comments from Urban Design, Environmental Planning and Development Engineering for a “one-window” Regional response. The following development volumes were received by the department during February 2021 (March data was not complete at the time of writing this memo):

- Planning Applications (includes zonings, subdivisions, site plans, etc.) – **40** (30)
- Engineering Applications (includes servicing reviews, site plans, etc.) – **16** (16)
- Private Septic Applications – **34** (30)
- Pre-consultations – **70** (56)

The total volume of applications (90 excluding pre-consultations) represents an 18.4% increase from the February 2020 (76 applications) and is shown in the graph below.



Pre-consultations experienced a 25% increase from the February 2020 volume (70 development proposals) and is shown in the graph below.



Notes:

a) March 2020 – Lockdown imposed mid-March resulted in beginning of volume decline due to pause in pre-consultation meetings

b) April 2020 – First full month in lockdown resulted in lowest volume of 25 over past two years

c) May 2020 – Volumes began return to normal levels as local area municipalities moved to virtual pre-consultation meetings

Infrastructure Planning & Development Engineering

Current Status of Operations

Development Engineering

Staff are continuing to respond to development applications with engineering comments, legal agreements for road works, and processing Environmental Compliance Approvals (ECA) under the Transfer of Review program for new sanitary and storm sewers. Additionally, staff are continuing with Stormwater Management (SWM) review, Transportation review/meetings, and Water & Wastewater (W&WW) review/meetings as it relates to development applications and inquiries. Staff are working on the SWM Guidelines Project with Wood Consulting Engineers and assessing schedule/deliverables to adapt to current situation. Participation in the MECP sessions and next steps for the proposed changes to the Consolidated Linear Infrastructure ECA Process for the entire sanitary or stormwater management system has been an ongoing focus. Once fully implemented this will result in changes and new processes for all local municipalities and the Region for the two-tiered sanitary (wastewater) system and stormwater management system in Niagara.

Infrastructure Planning

For the 2021 W&WW Master Servicing Plan (MSP) Update project, on April 21 we are planning to have our Notice of Commencement/Public Information Centre #1 virtually on the project website. We will have our first major coordination and consultation meeting with W&WW team and Local Municipalities on April 8. This is an important project for the Region and all local municipalities with urban water and sanitary sewer services. It will require significant effort, analysis, and consultation with the majority of work to be completed by end of 2021/early 2022. The resulting growth capital water and wastewater projects are an essential input for the Development Charges Background Study and By-law update.

We continue to lead the Pollution Prevention Control Plan project for West Niagara in partnership with Grimsby, Lincoln, and West Lincoln analyzing the collective sanitary sewer collection system while identifying priority areas on wet weather mitigation.

Niagara 2051 represents the corporate wide-efforts to coordinate long range planning/growth with infrastructure planning projects (2021 W&WW MSP update) and the upcoming Development Charges Background Study & By-law update, to accommodate the anticipated growth out to 2051.

Development Industry Liaison

Staff are continuing with the review of the potential build out scenarios for the urban areas in collaboration with planning group. This is necessary for the 2021 W&WW MSP update to evaluate servicing implications and supporting infrastructure. Staff are leading the development application process for the Linhaven and Gilmore Long Term Care (LTC) Redevelopment Projects and coordinating with St. Catharines and Fort Erie, respectively, as well as the MTO, and other review agencies to ensure that site plan application can be approved and the timelines associated with this project remain on track (Government funding is tied to this as well). Additionally Staff are participating with development industry meetings (NHBA) to continue to foster our relationship with the residential development industry and to keep them apprised of the various corporate wide projects and initiatives the Region is working on.

Private Sewage/Septic Systems Program

The Private Sewage System group (responsible for Part 8 of the Ontario Building Code) is continuing to receive and respond to septic permit applications, inspections, development applications, special requests and complaints.

Respectfully submitted and signed by

Doug Giles, MES, BUP
Acting Commissioner Planning and Development Services

Niagara Economic Update Presentation

Planning and Economic Development Committee

ED 9 - 2021

April 14, 2021

Blake Landry

Manager, Economic Research & Analysis

Economic Development

Niagara Economic Update

Planning and Economic Development Committee

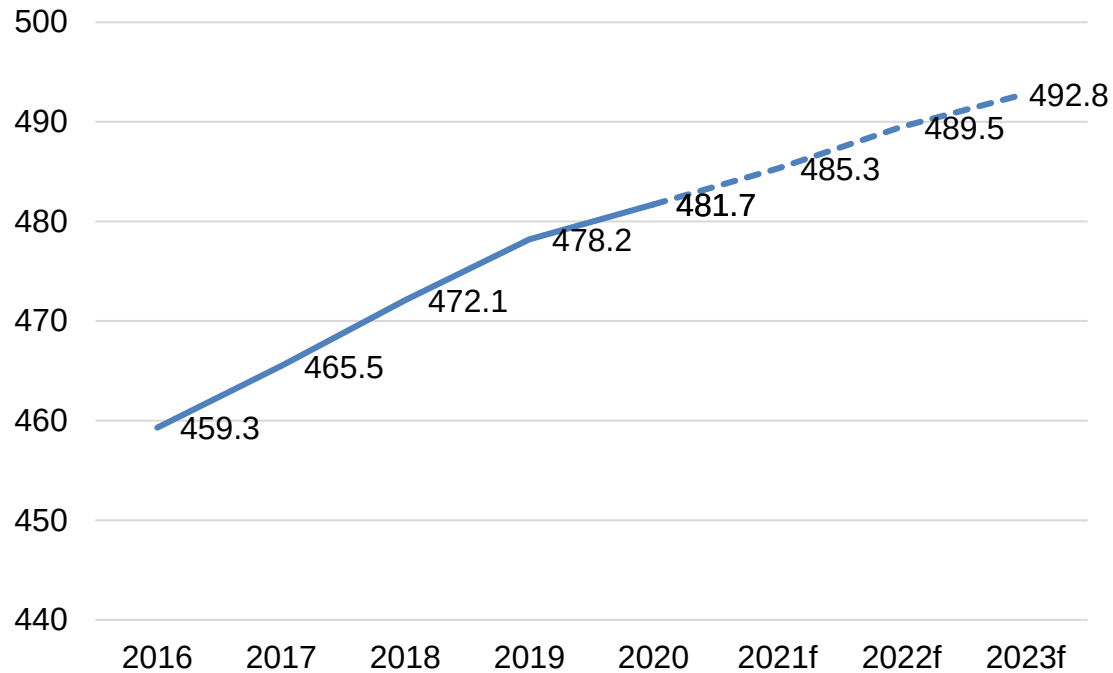
April 14, 2021

Blake Landry, Ec.D.

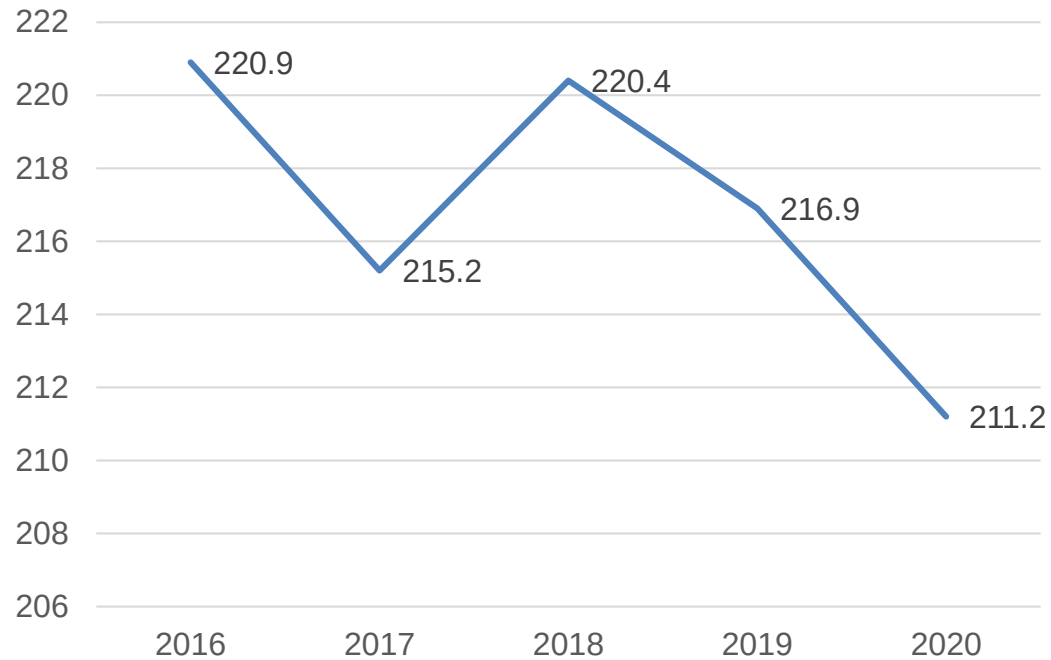
Manager, Economic Research & Analysis

Economic Development

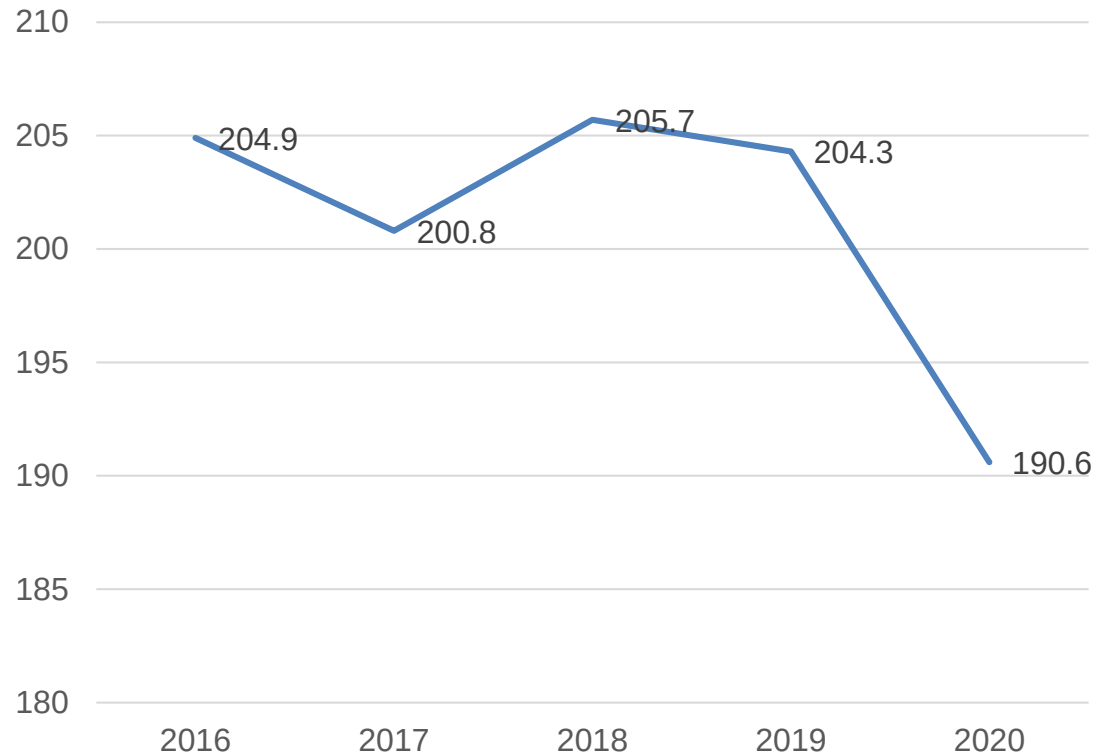
Population, Niagara Region



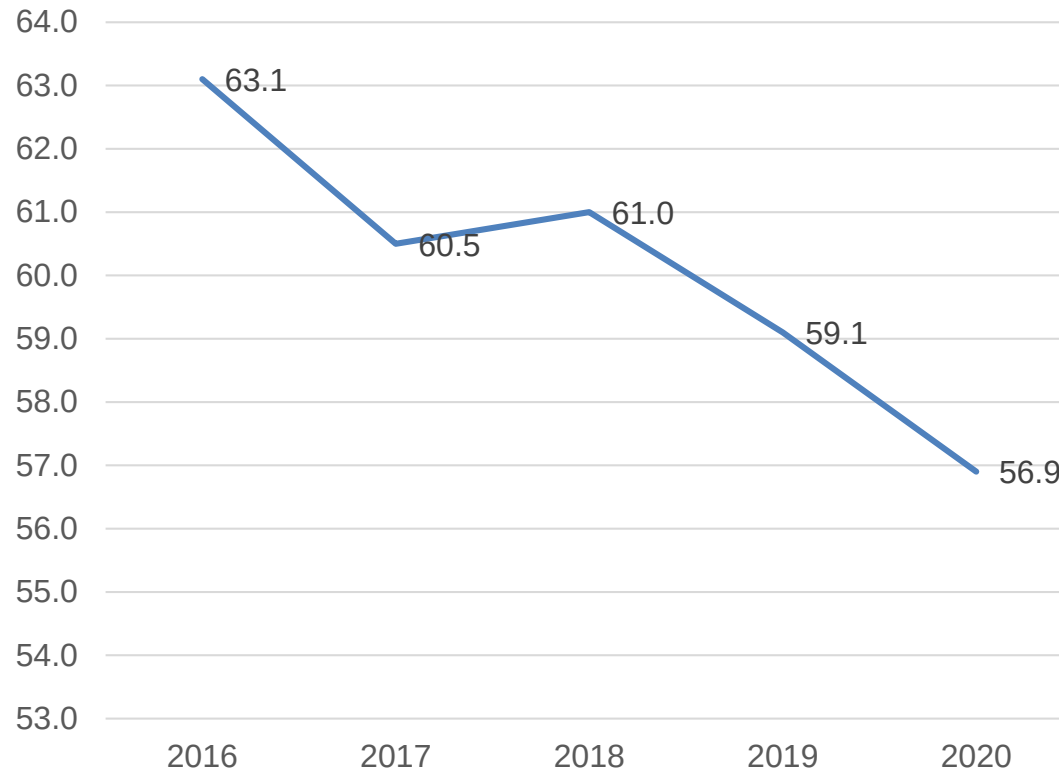
Labour Force (x1,000), Niagara CMA



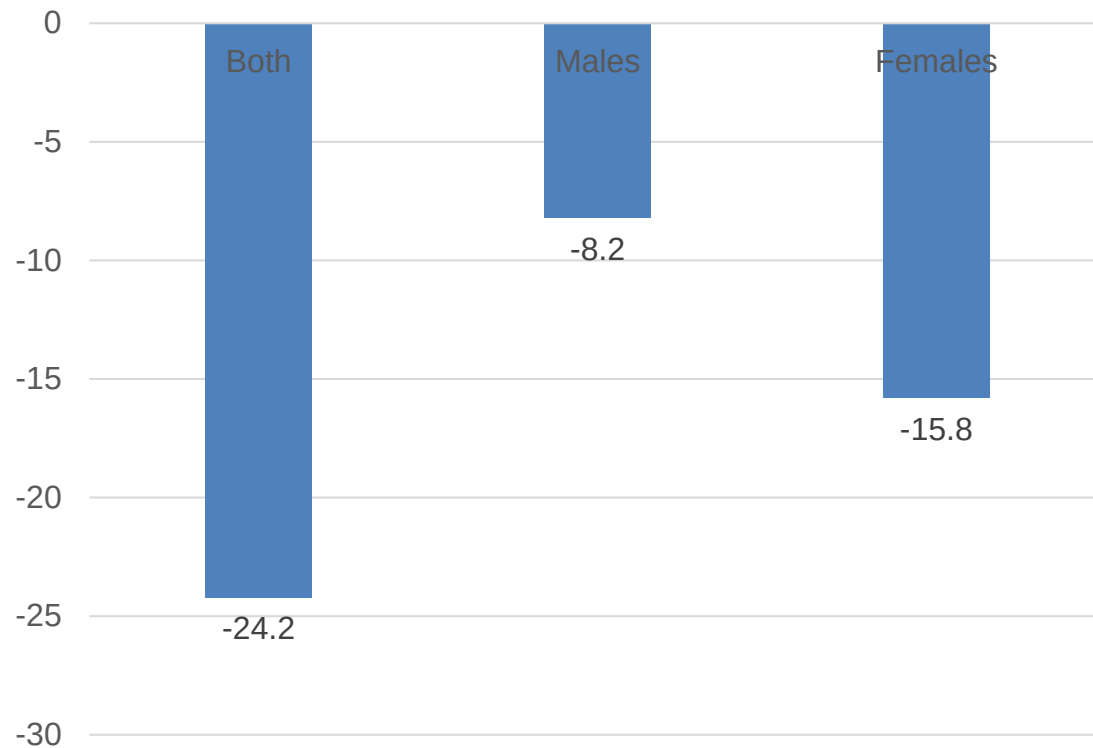
Employment (x1,000), Niagara CMA



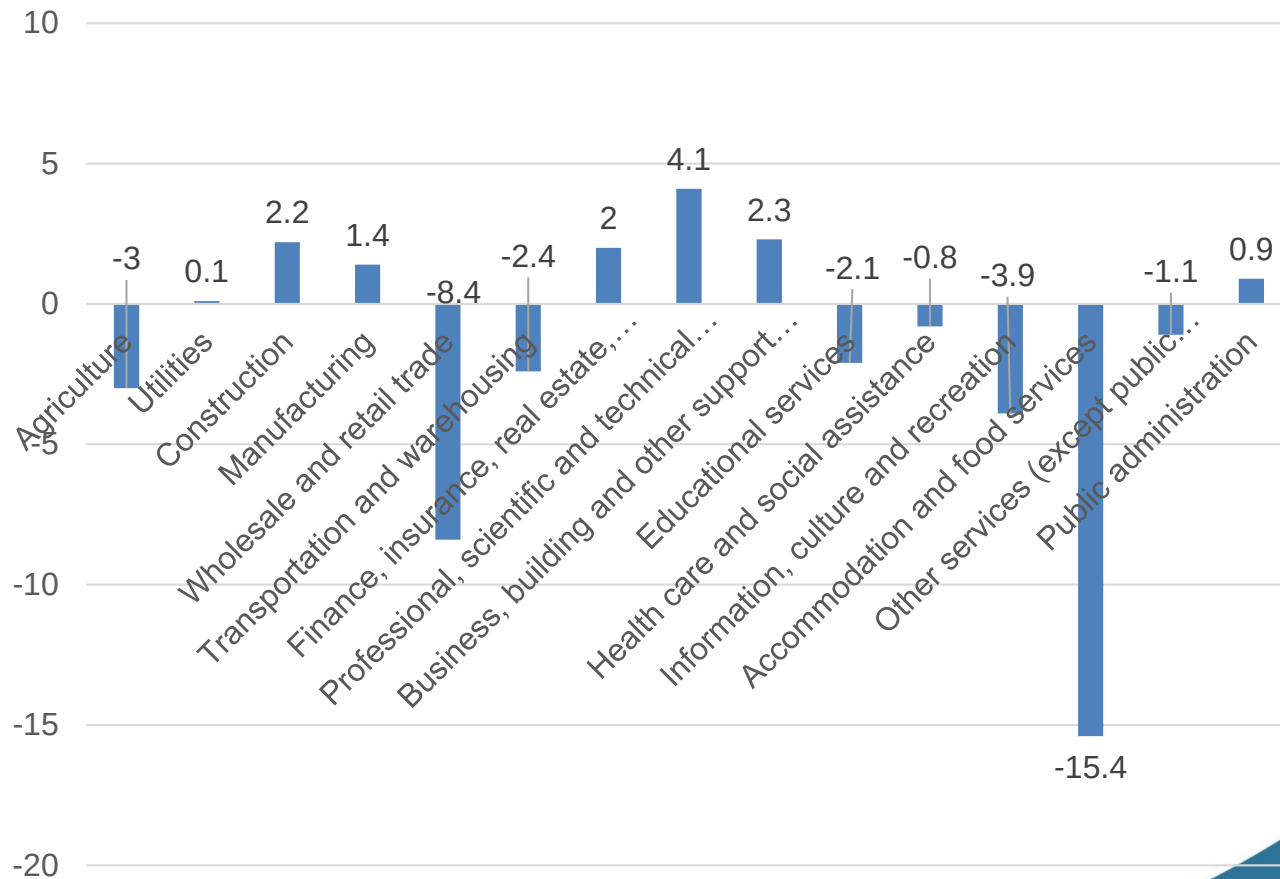
Participation Rate (%), Niagara CMA



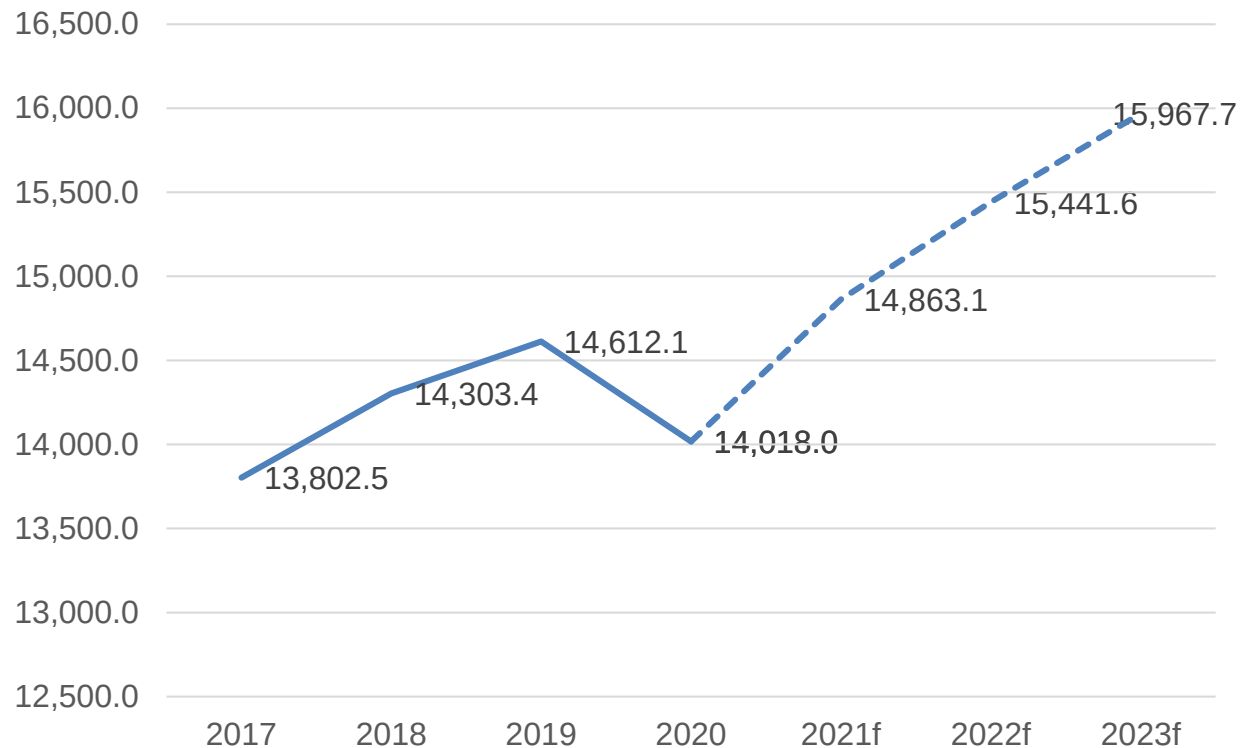
Employment Change (x1,000), Feb. 2020 to Feb. 2021, Niagara CMA



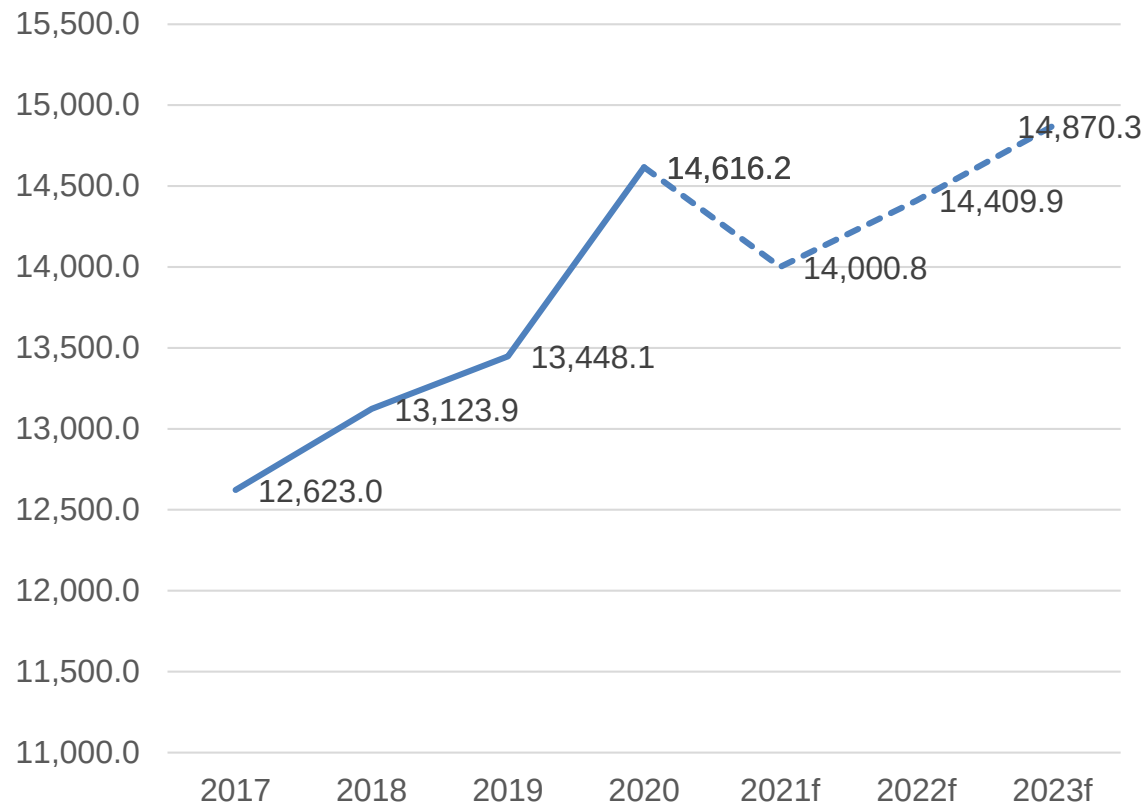
Employment Change by Sector (x1,000), Feb. 2020 to Feb. 2021, Niagara CMA



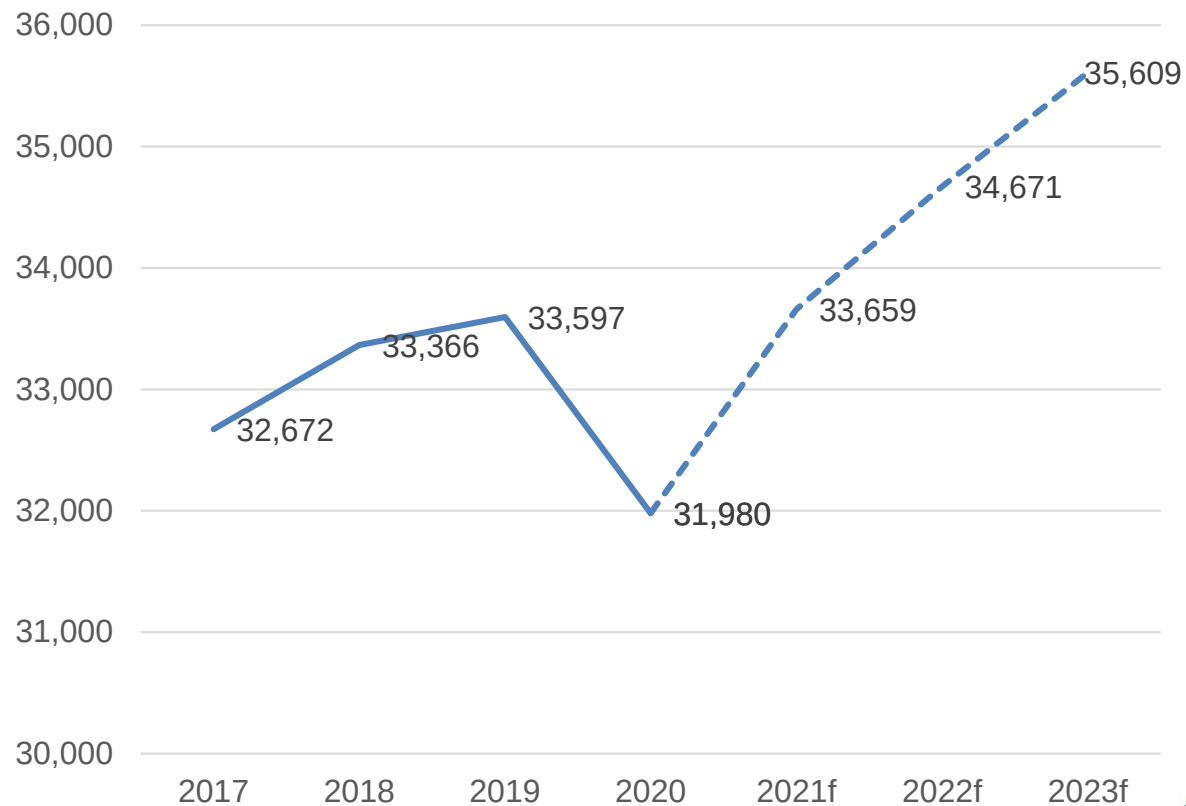
Total Household Income (\$ millions), Niagara CMA



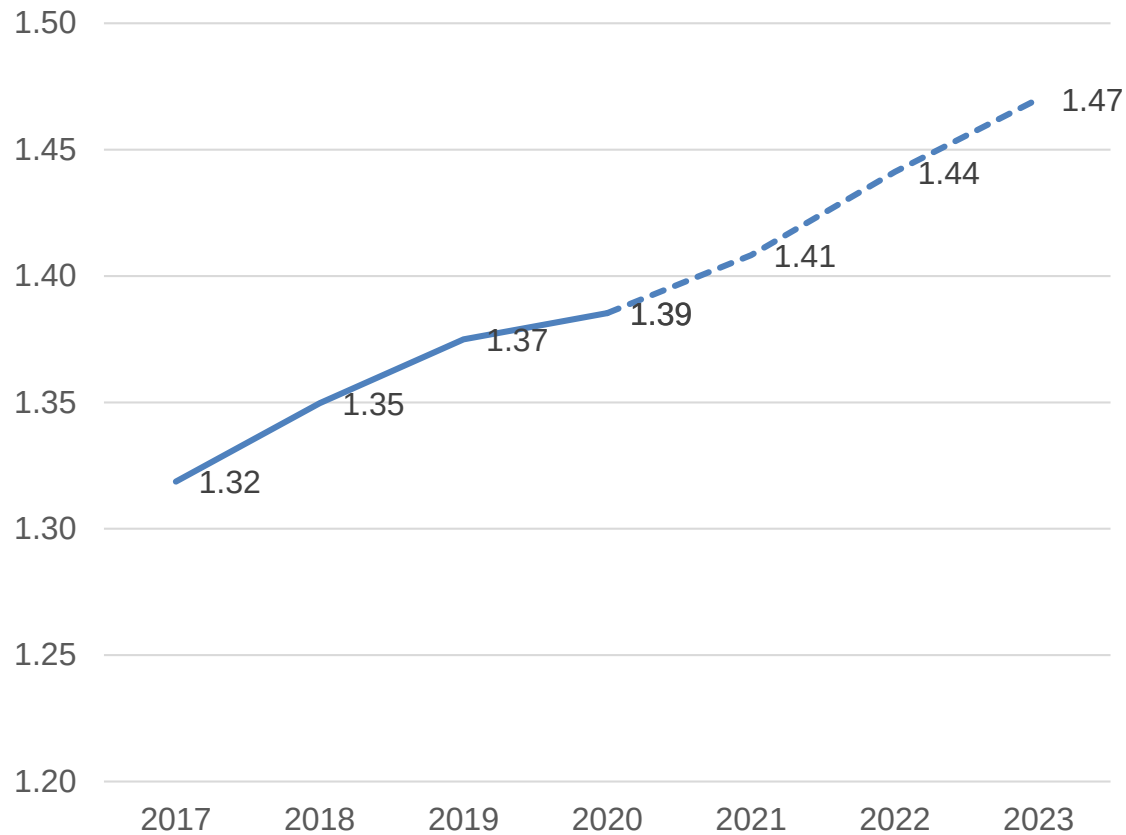
Total Household Disposable Income (\$ millions), Niagara CMA



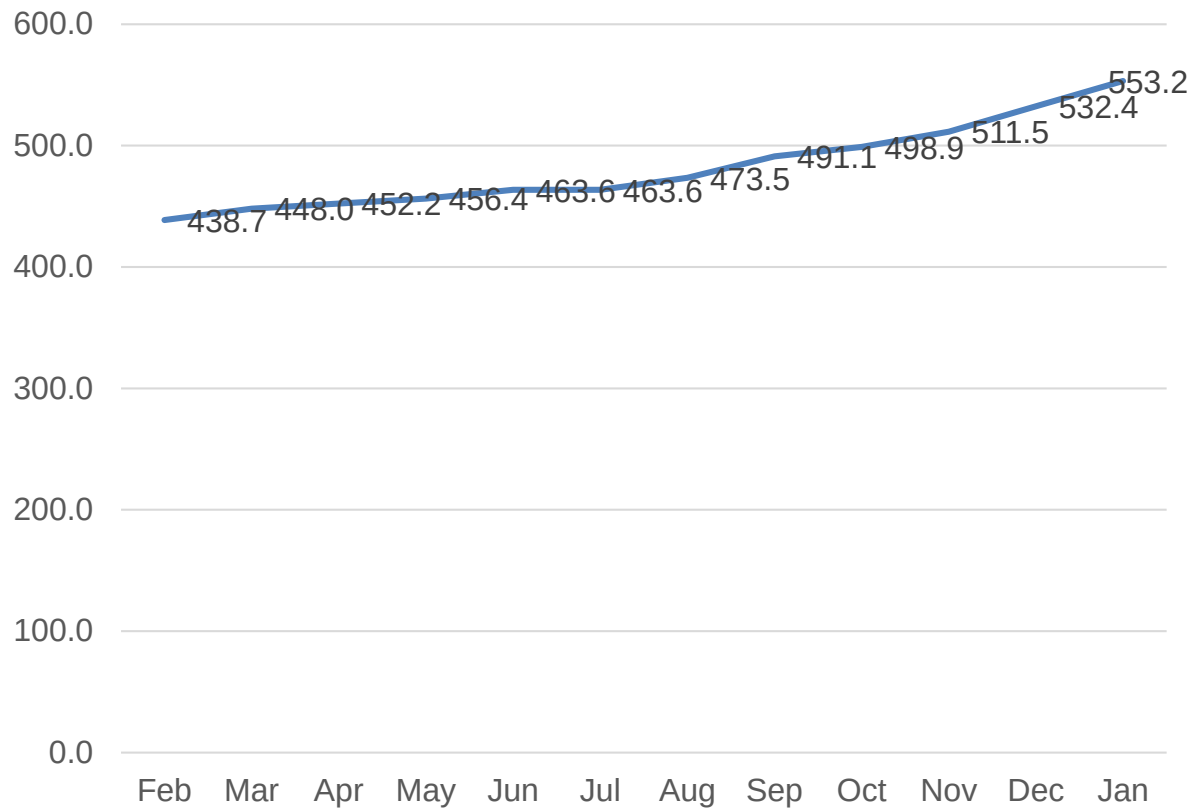
Household Income Per Capita (\$), Niagara CMA



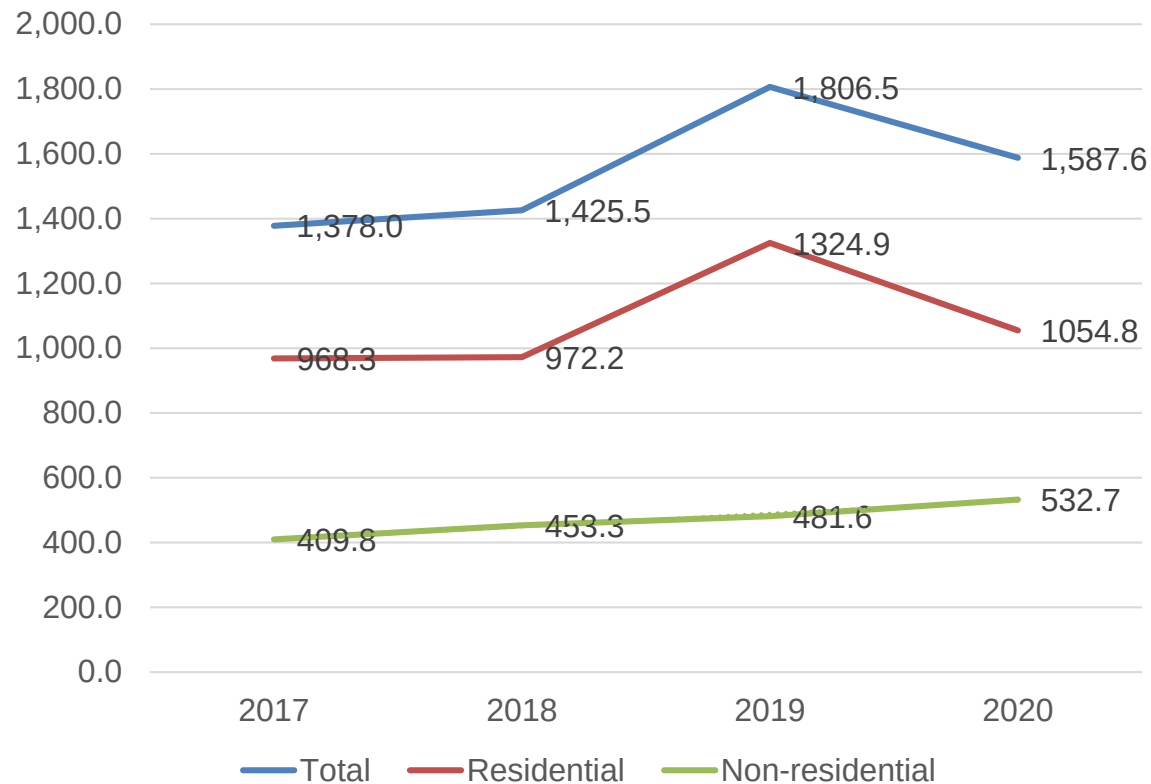
Consumer Price Index (2002=1.0), Niagara CMA



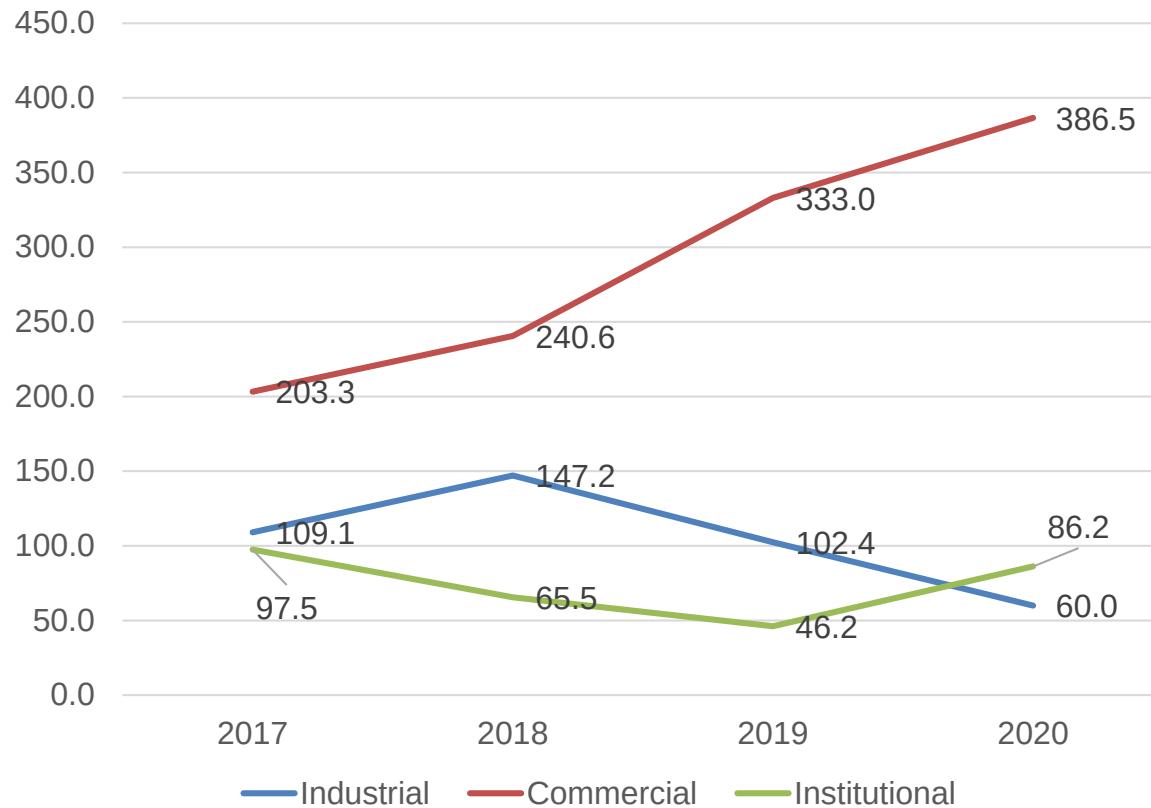
Housing Price Index (\$ thousands), Feb. 2020 to Jan. 2021, Niagara Region



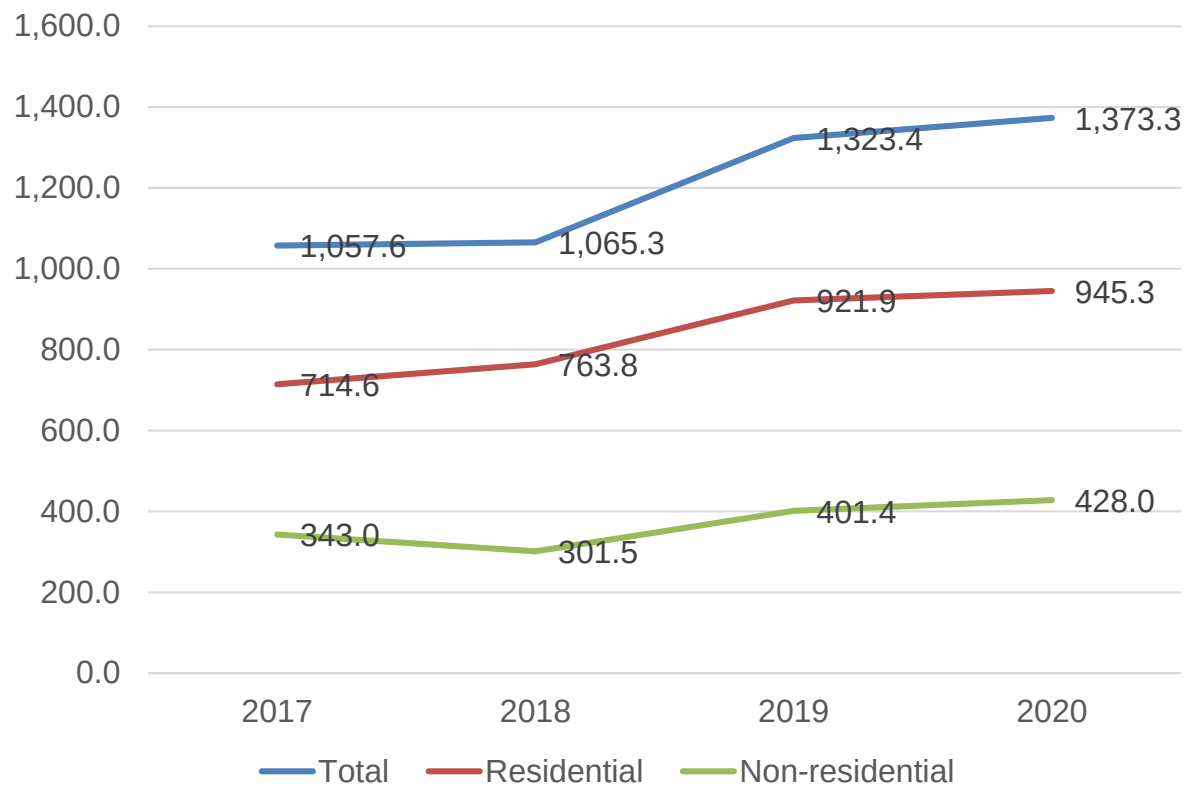
Investment in Building Construction (\$ millions), Constant Values, Niagara CMA



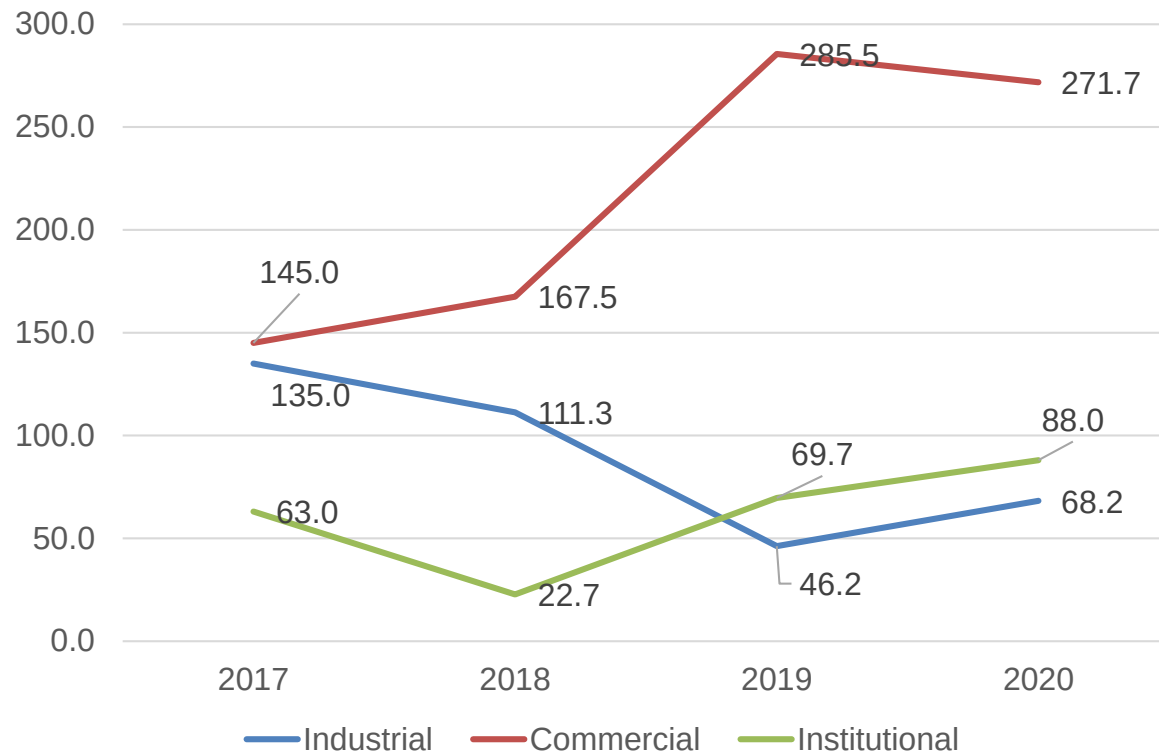
Investment in Building Construction (\$ millions), Non-residential, Constant Values, Niagara CMA



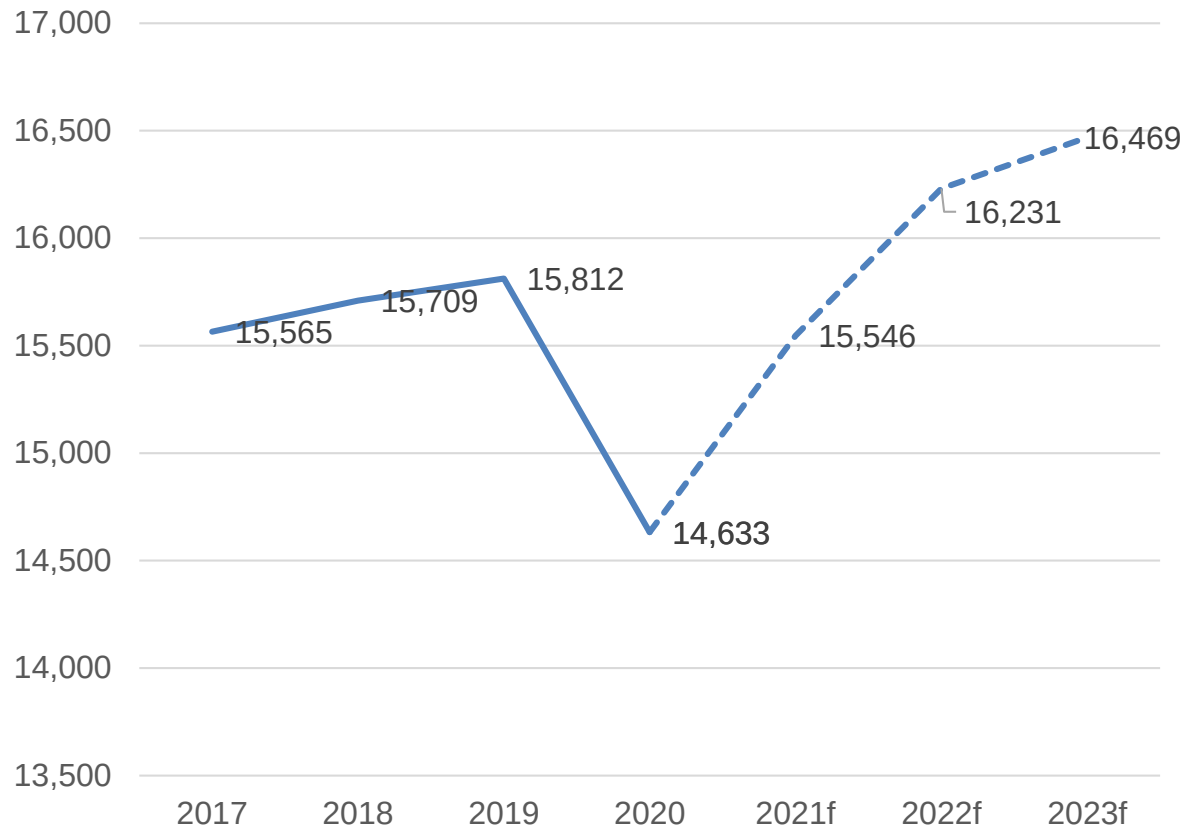
Building Permit Values (\$ millions), Niagara CMA



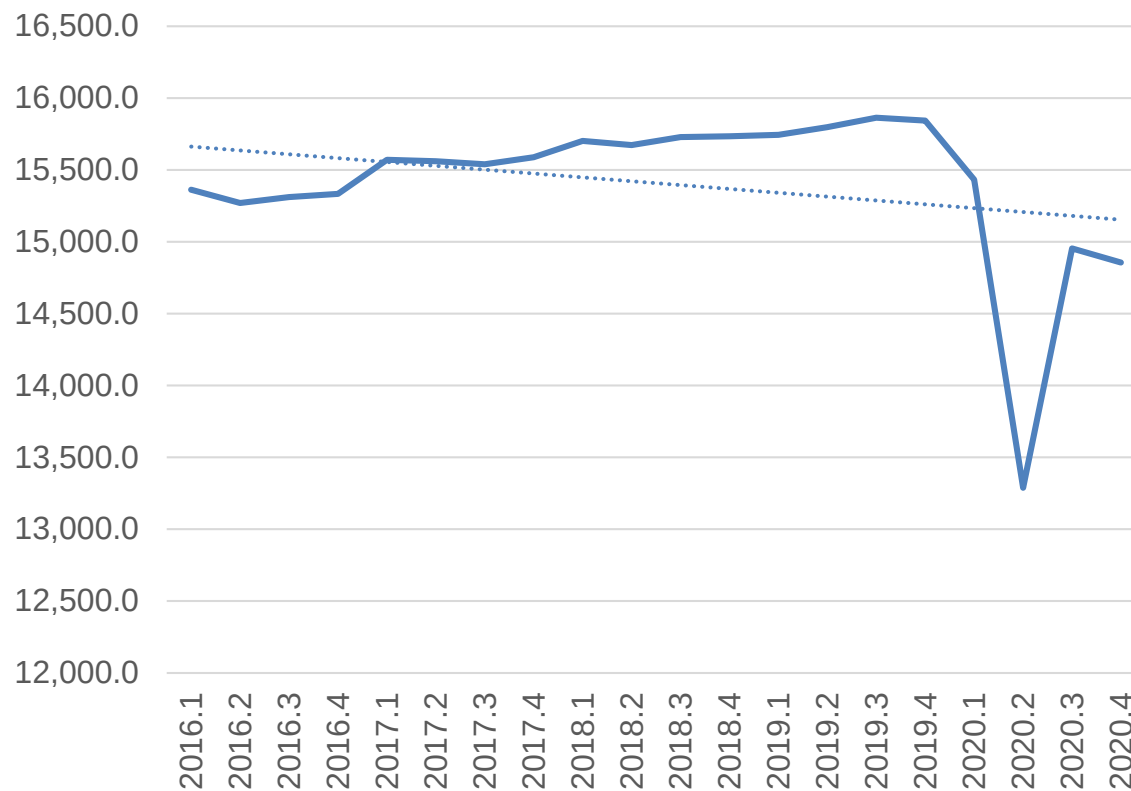
Building Permit Values (\$ millions), Non-residential, Niagara CMA



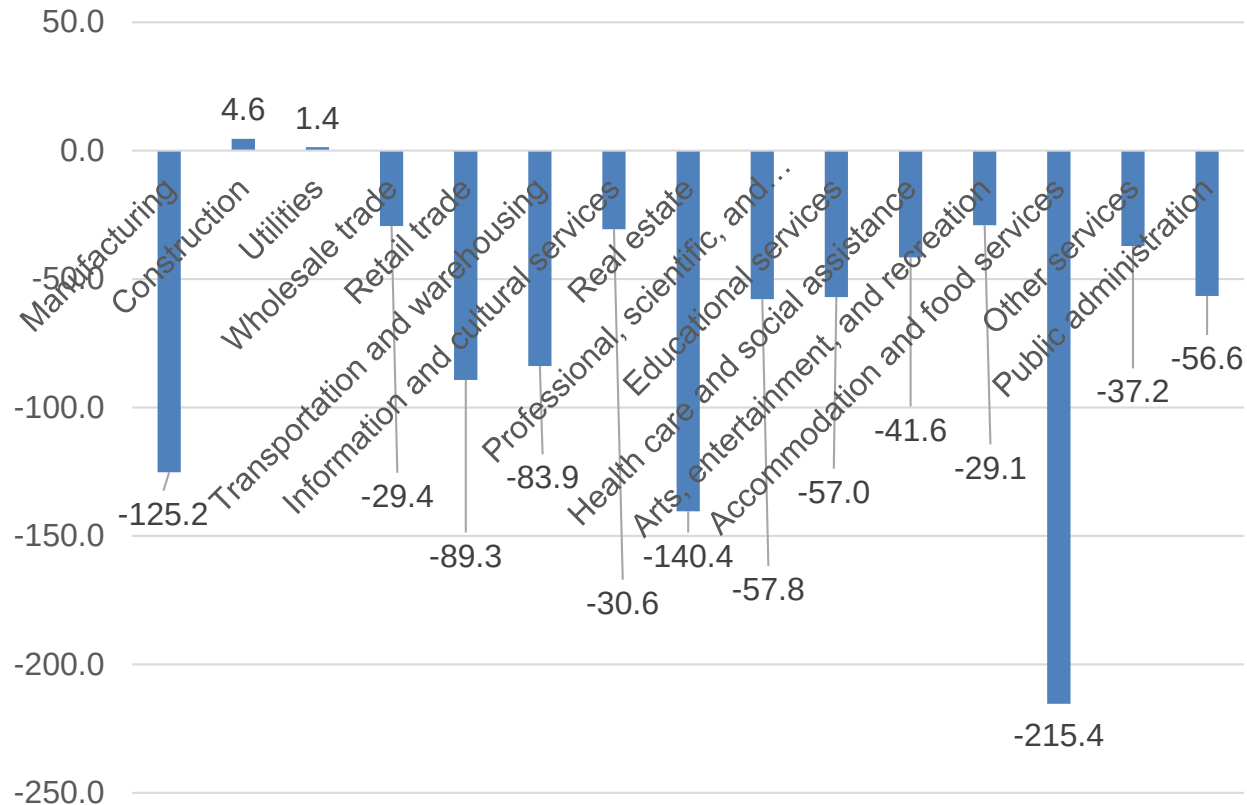
Real GDP (2012 \$ millions), Annual, Niagara CMA



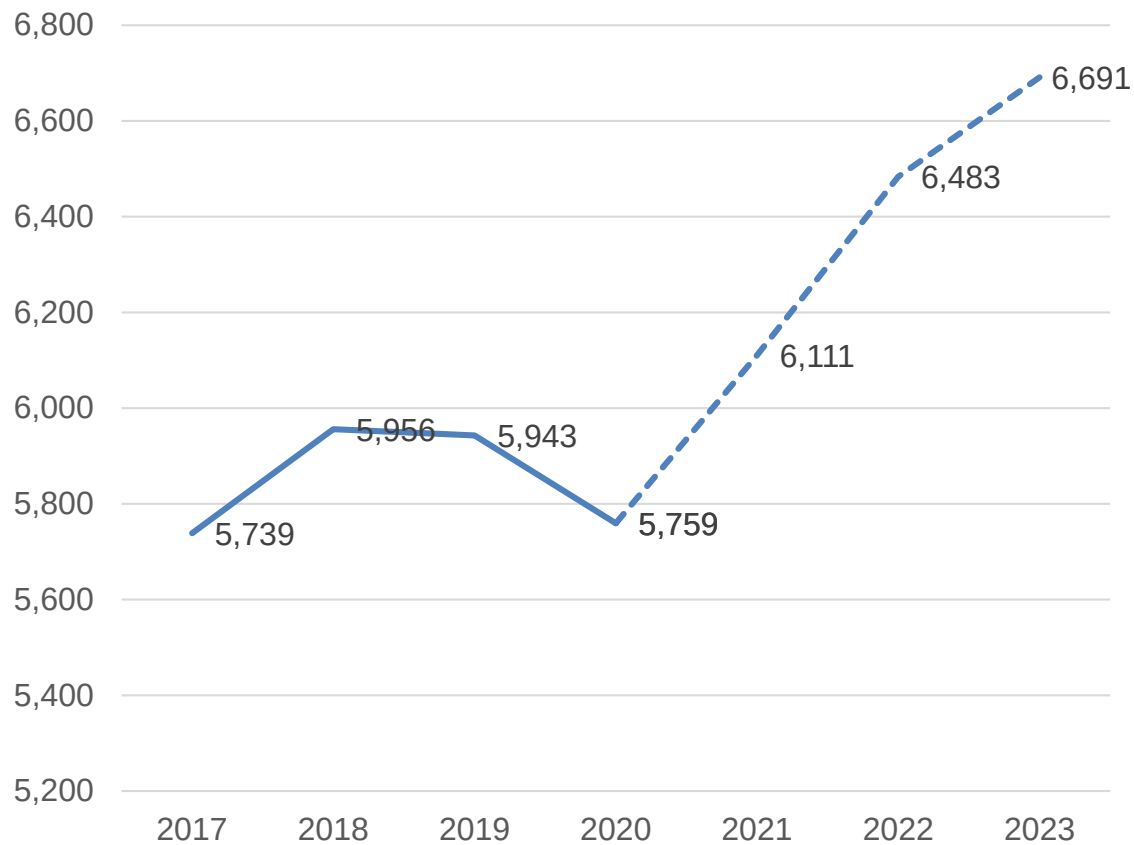
Real GDP (2012 \$ millions), Quarterly, Niagara CMA



Real GDP Change By Sector (2012 \$ millions), Feb. 2020 to Feb. 2021, Niagara CMA



Retail Sales (\$ millions), Niagara CMA



Questions

Contact:

Blake Landry, Ec.D.
Manager, Economic Research & Analysis
Economic Development
blake.landry@niagararegion.ca

Subject: Niagara Economic Update

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 14, 2021

Recommendations

1. That Report ED 9-2021 **BE RECEIVED** for information.

Key Facts

- The purpose of this report is to provide PEDC with an update on Niagara's regional economy while highlighting the impacts of the COVID-19 pandemic.
- In 2020, Niagara experienced a 7.5% reduction in GDP over 2019. In comparison, the Great Recession of 2008-2009 resulted in a 3.1% decline in GDP.
- Unlike the Great Recession, which took many years to recover from, Niagara is forecasted to rebound quickly with recovery happening over 2021 and a return to an economic growth trajectory by the end of 2022.
- Current challenges that threaten recovery include the possibility of COVID-19 variants prolonging economic restrictions, the loss of people from the labour force who exited during the pandemic, affordability challenges exacerbated by a forecasted high rate of inflation and increasing housing market prices, access to skilled talent, age and gender equity issues that were exacerbated by the pandemic, a delayed return of international tourism markets, and the return of export markets among a renewed interest in global trade protectionism.

Financial Considerations

None applicable.

Analysis

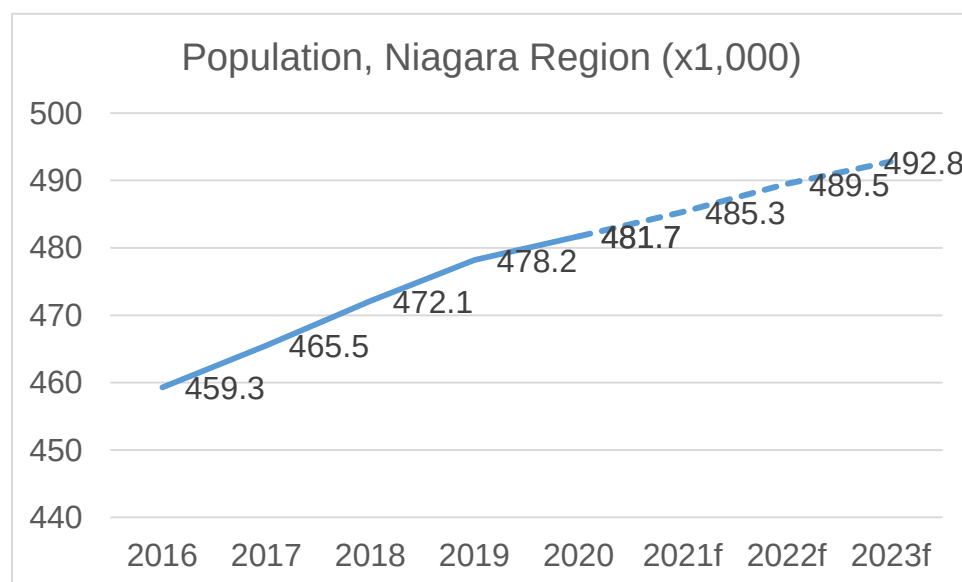
It is quite evident that the COVID-19 pandemic has had extensive negative impacts on the Niagara regional economy. The onset of the pandemic has resulted in the biggest economic disruption in the history of Niagara. Lockdowns, supply shortages, market disruptions, market instability, and loss of employment and income in some of Niagara's most important economic sectors has put Niagara's economy in a precarious position.

Niagara's economic future is dependent on the course of the COVID-19 virus, which is evident in the data discussed below.

That said, there are signs that Niagara's economy can recover quickly. Population growth remains strong, the housing market remains very strong, investment in building construction and building permit values remain very strong, and GDP and retail sales are forecasted to rebound quickly, which will improve employment and income conditions. However, this is strictly contingent on the course of the virus. Employment and GDP are directly affected by pandemic restrictions. Once the population is vaccinated and the virus is contained and restrictions are lifted, the economy is forecasted to fully recover within the next couple of years.

This report explores major economic indicators including population, employment, income, inflation, housing prices, investment, building permits, business counts, gross domestic product (GDP), retail sales and international trade.

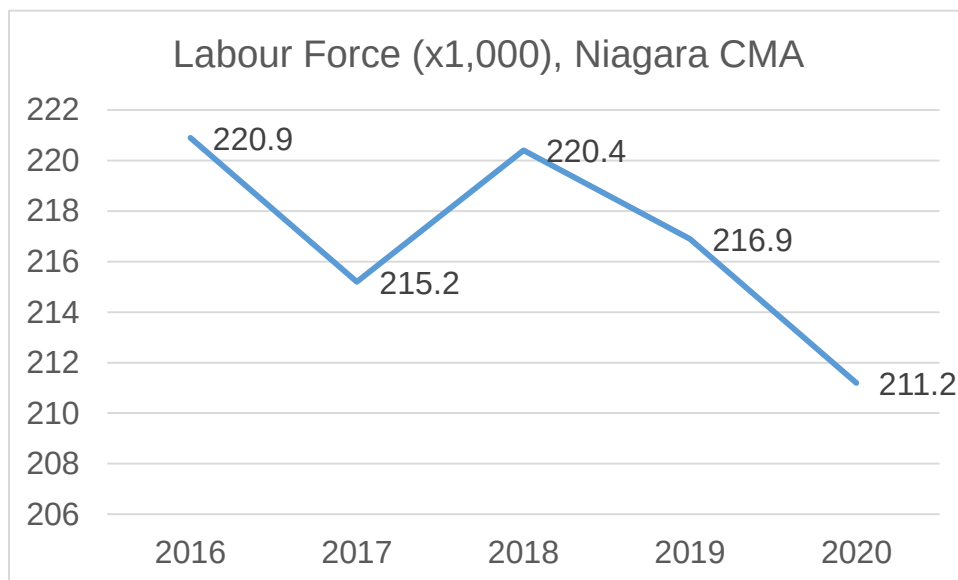
It addresses the past few years of economic activity and provides some forecasts for the next few years with consideration for the impact of COVID-19 on the regional economy.



Statistics Canada, Table: 17-10-0142-01 with forecasts from the Conference Board of Canada

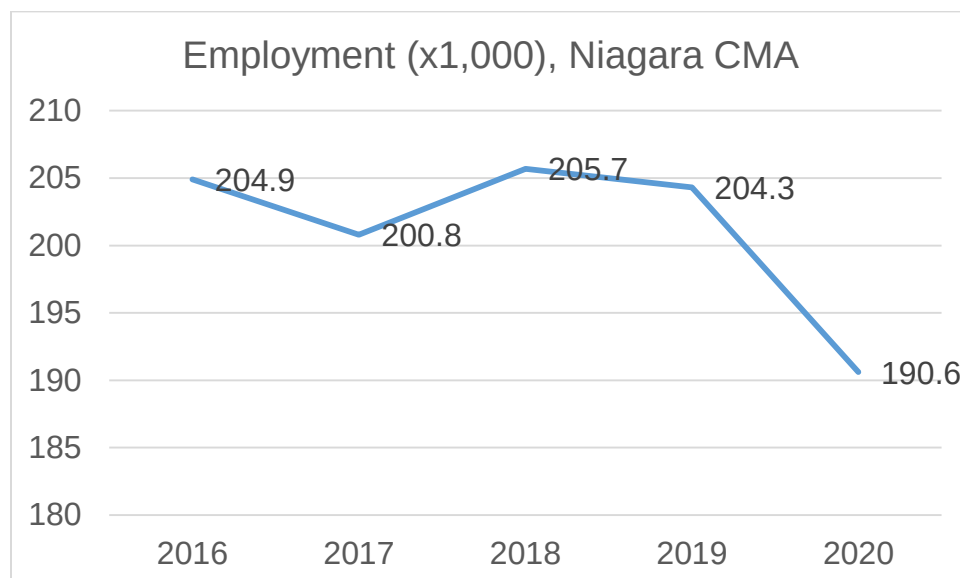
- Prior to 2016, population growth in Niagara was an annual average of 0.8%
- Since 2016, population growth has accelerated to an annual average of 1.3%.

- From 2016 to 2020, the population grew by 22,465 people or 5%.
- Niagara's population is forecasted to grow by another 11,085 or 2.3% by 2023.



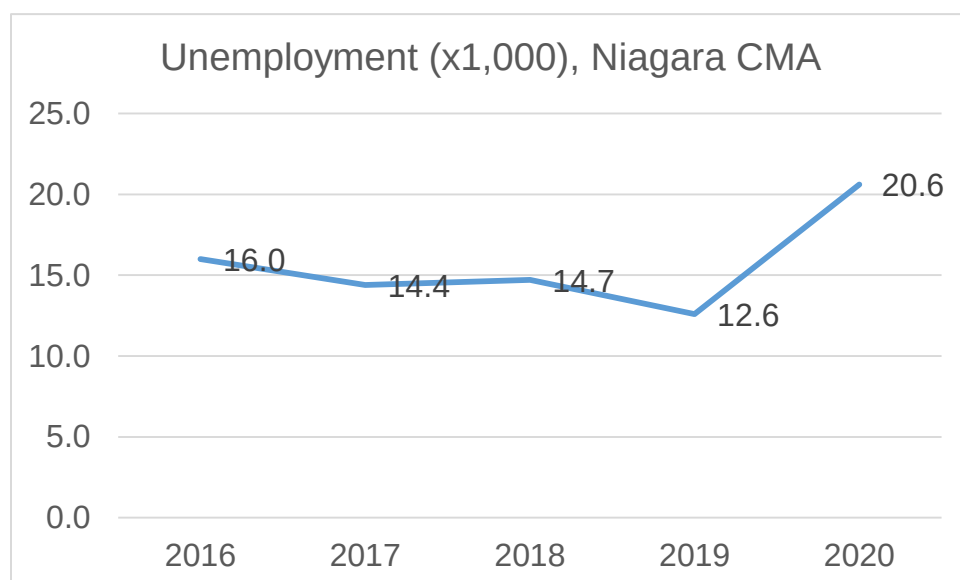
Statistics Canada, Table: 14-10-0385-01

- Niagara's labour is often volatile due to characteristics such as an aging demographic in Niagara choosing to leave the labour force. However, 2020 shows a significant decline.
- The labour force experienced a major decline of 5,700 or 2.6% people from 2019 to 2020.
- The decline in labour force reflects the number of people seeking not to work or seek work during this period.



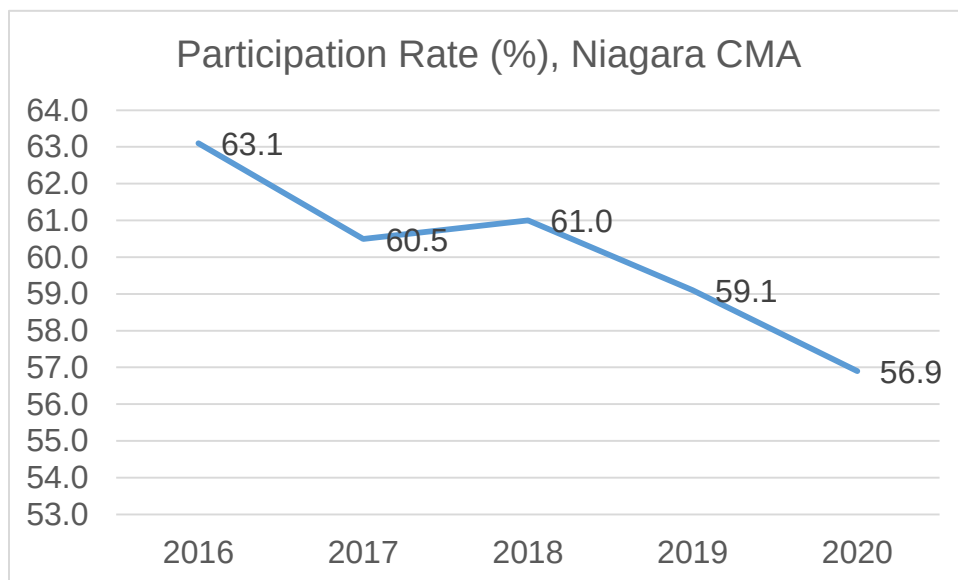
Statistics Canada, Table: 14-10-0385-01

- Employment remained strong in 2018 and 2019. However, it experienced a massive decline in 2020 of 13,700 people or 6.7%.
- Forecasts by The Conference Board of Canada suggest that employment will fully rebound by 2022, but it is contingent on the course of COVID-19.



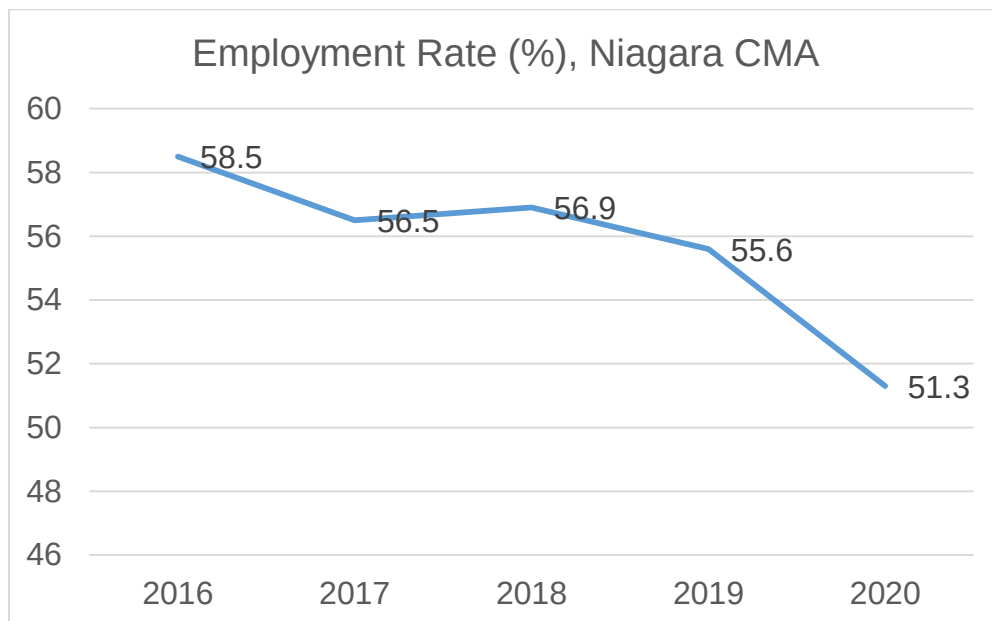
Statistics Canada, Table: 14-10-0385-01

- Unemployment gradually declined by 3,400 or 2.1% from 2016 to 2019. However, there was a major increase of 8,000 people or 6.3% from 2019 to 2020.



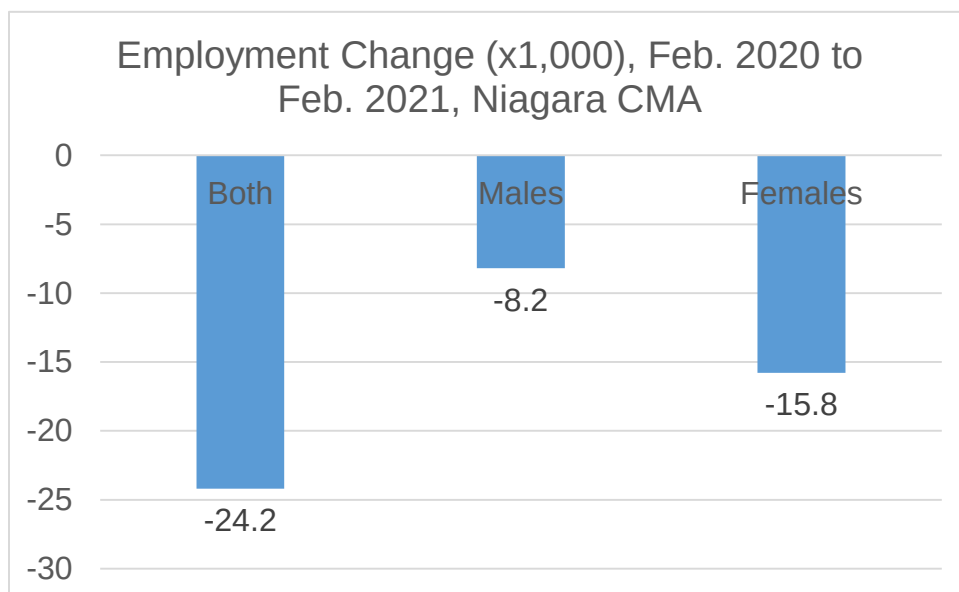
Statistics Canada, Table: 14-10-0385-01

- Niagara's participation rate has been in a gradual decline. From 2016 to 2020, there are 6,200 or 6.2% fewer people participating in the labour force.
- One would think this decline is a result of the aging demographic in Niagara. However, 2019 to 2020 was unique. A closer look at the data shows that the biggest loss was from the 15 to 25 years demographic (-15.6%).
- Females were affected disproportionately more at -31.3% compared to males at -3.2%.
- Interestingly, the biggest gains were in the 55 to 64 years demographic at 9.7%. Males gain by 9.7% and females by 7.5%.
- The 65 years and over demographic continued to decline at -4.6%.



Statistics Canada, Table: 14-10-0385-01

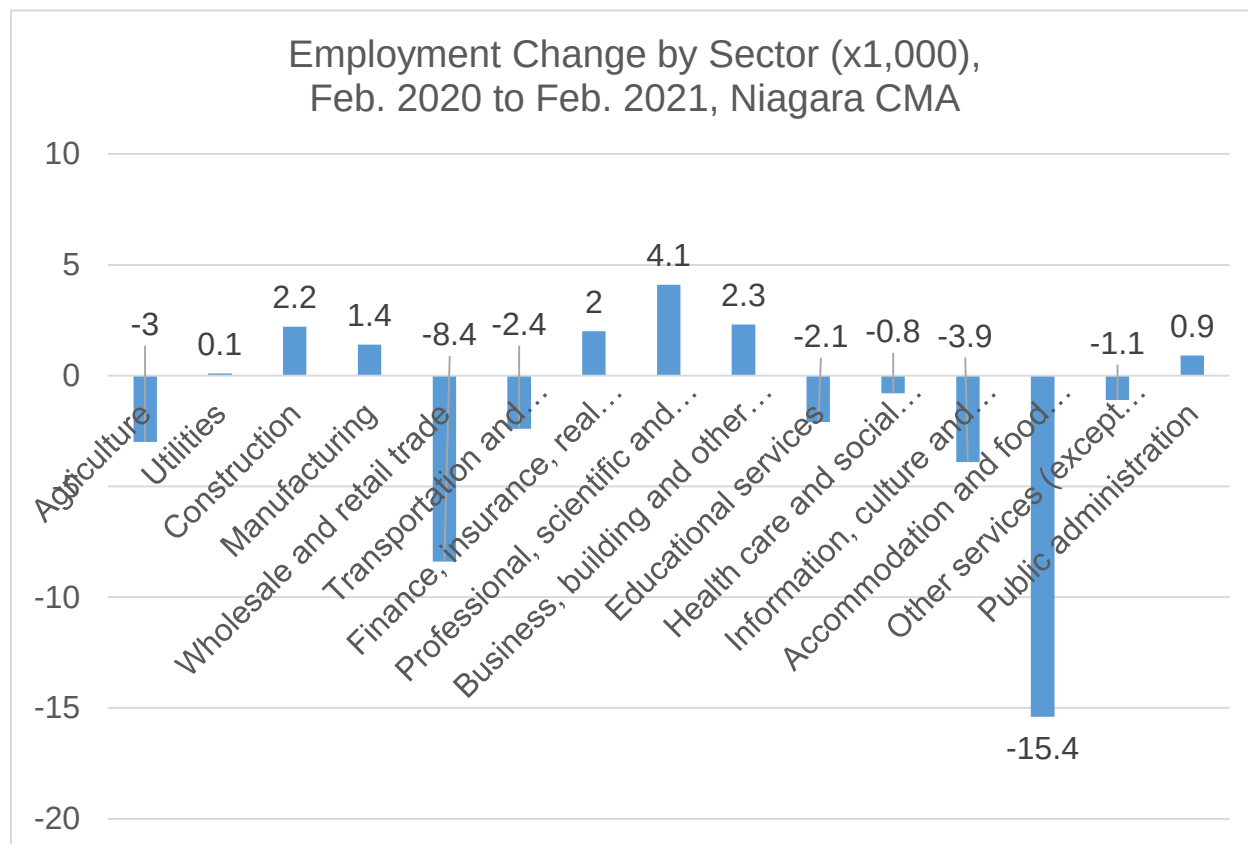
- Niagara's employment rate has experienced a gradual decline since 2016, but it accelerated drastically in 2020.
- From 2018 to 2020, the employment rate declined by 4.3%.



Statistics Canada, Table: 14-10-0378-01

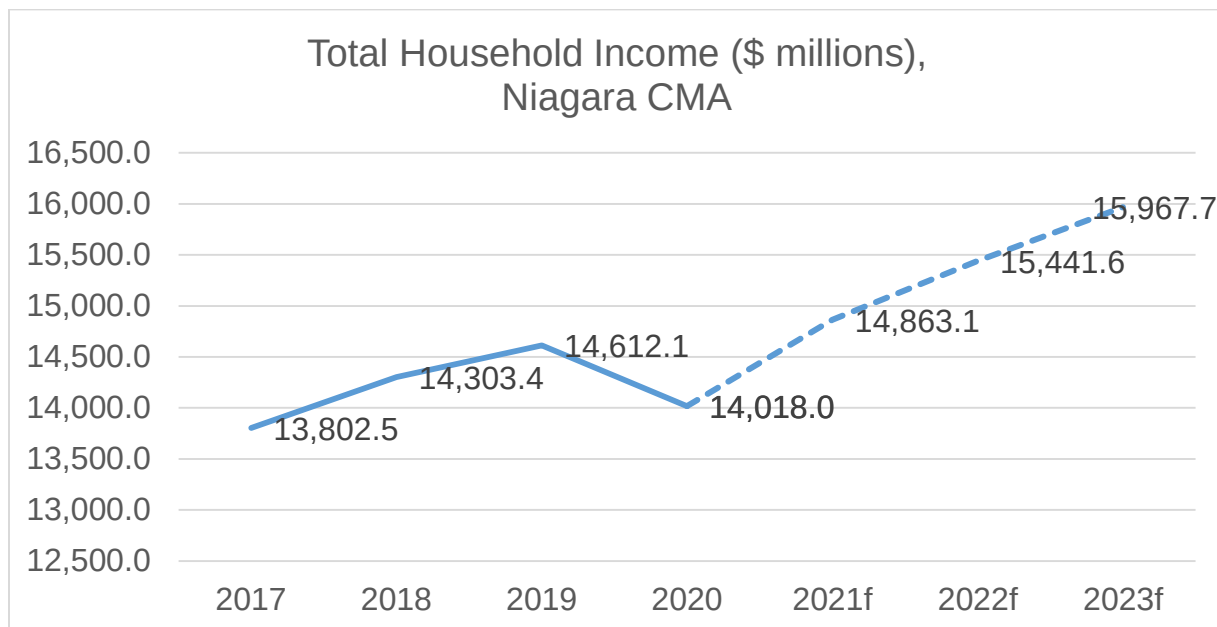
- From February 2020 to February 2021, employment declined by 24,200 people.

- The impacts of this were felt disproportionately between males and females.
8,200 of these people were male and 15,800 were female.



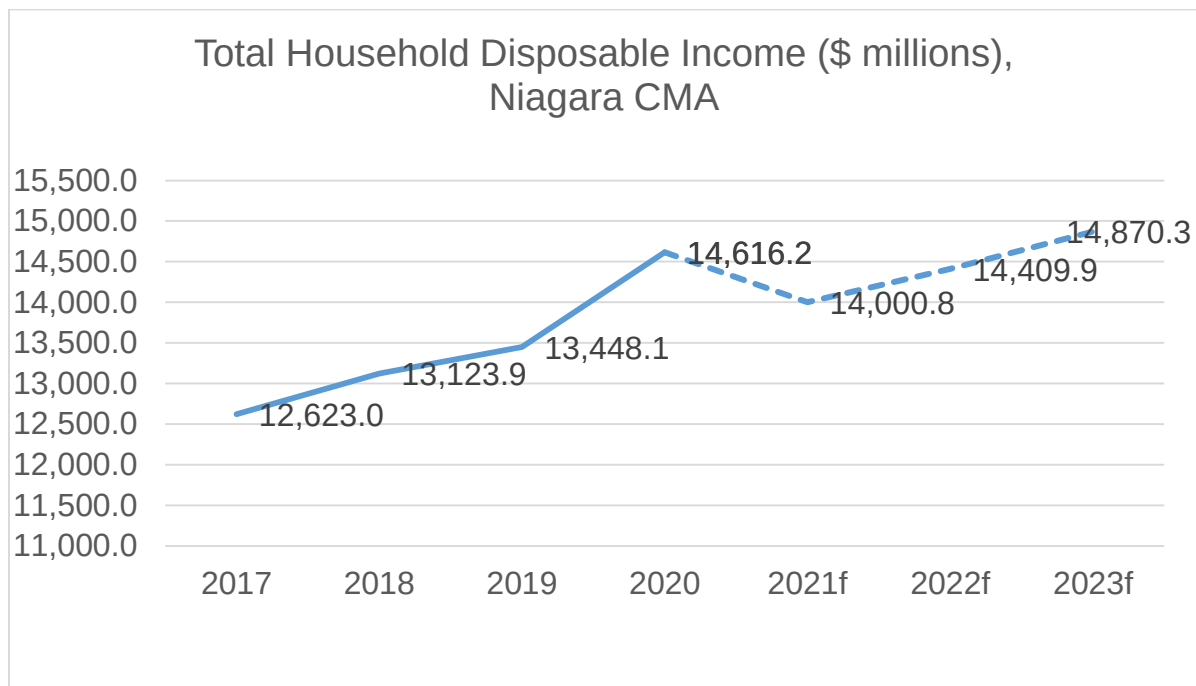
Statistics Canada, Table: 14-10-0379-01

- The decline in employment in Niagara impacted the industry sectors disproportionately.
- Construction; finance, insurance, real estate, rental and leasing; professional, scientific and professional services; business, building and other services; and public administration all experienced modest employment gains.
- Agriculture; wholesale and retail trade; transportation and warehousing; educational services; health care and social assistance; information, culture and recreation; accommodation and food services; and other services all experience a significant decline in employment.



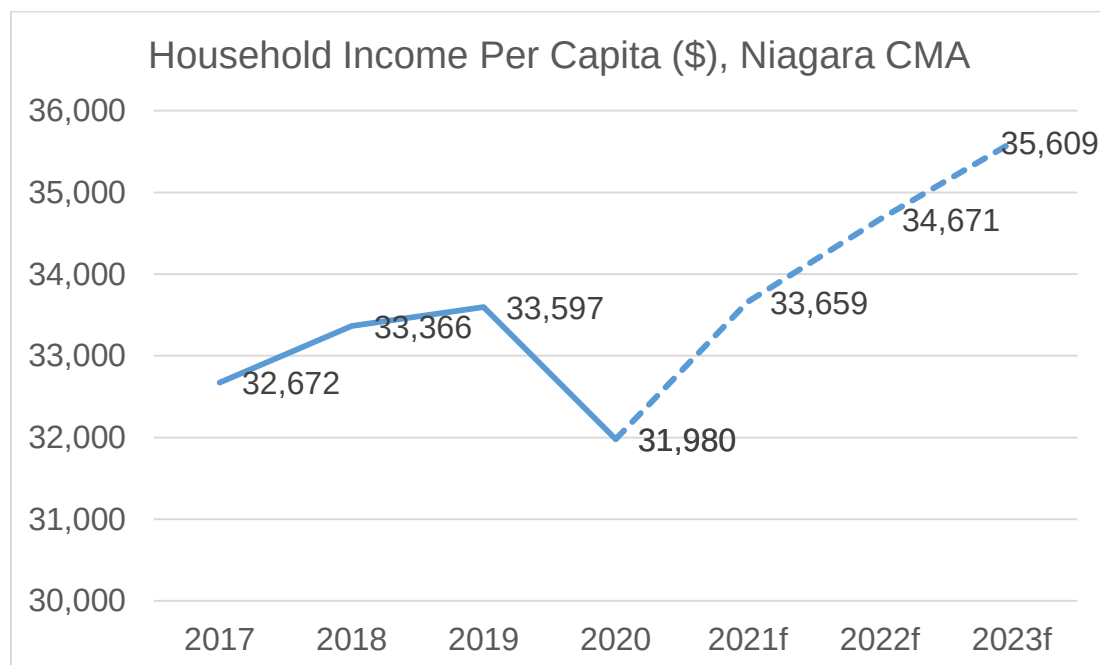
The Conference Board of Canada, Key Economic Indicators, St. Catharines-Niagara

- Total housing income in Niagara was growing, but experienced a significant decline in 2020 of \$594.1 million or 4%.
- It is forecasted to recover through 2021 and be on a growth trajectory again in 2022.



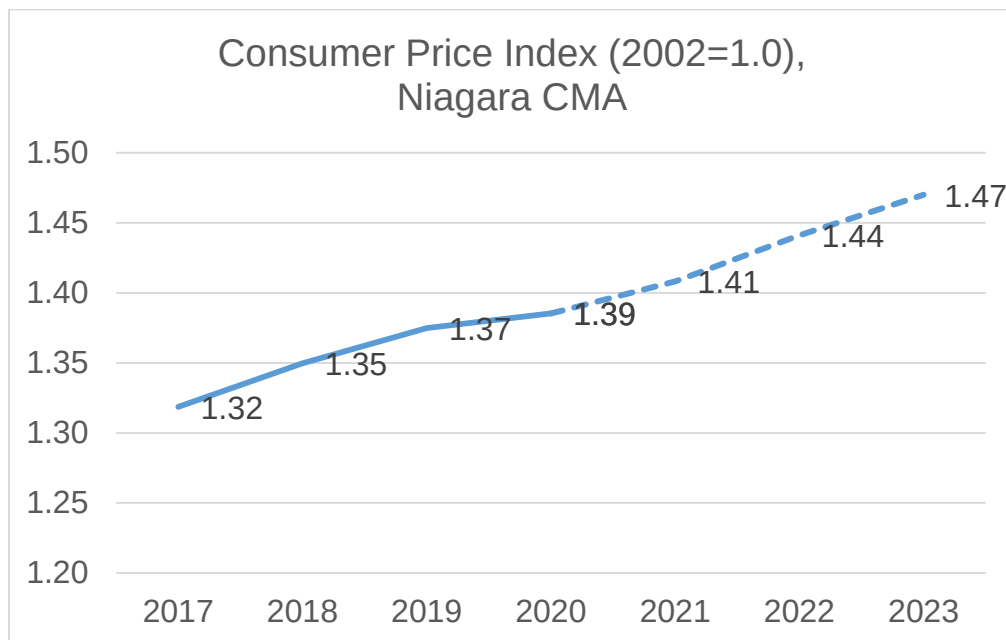
The Conference Board of Canada, Key Economic Indicators, St. Catharines-Niagara

- From 2019 to 2020, total household disposable income actually grew significantly by \$1.2 billion or 8.7%.
- It is forecasted to decline over 2021 as the economy reopens and people with income begin spending their money again.



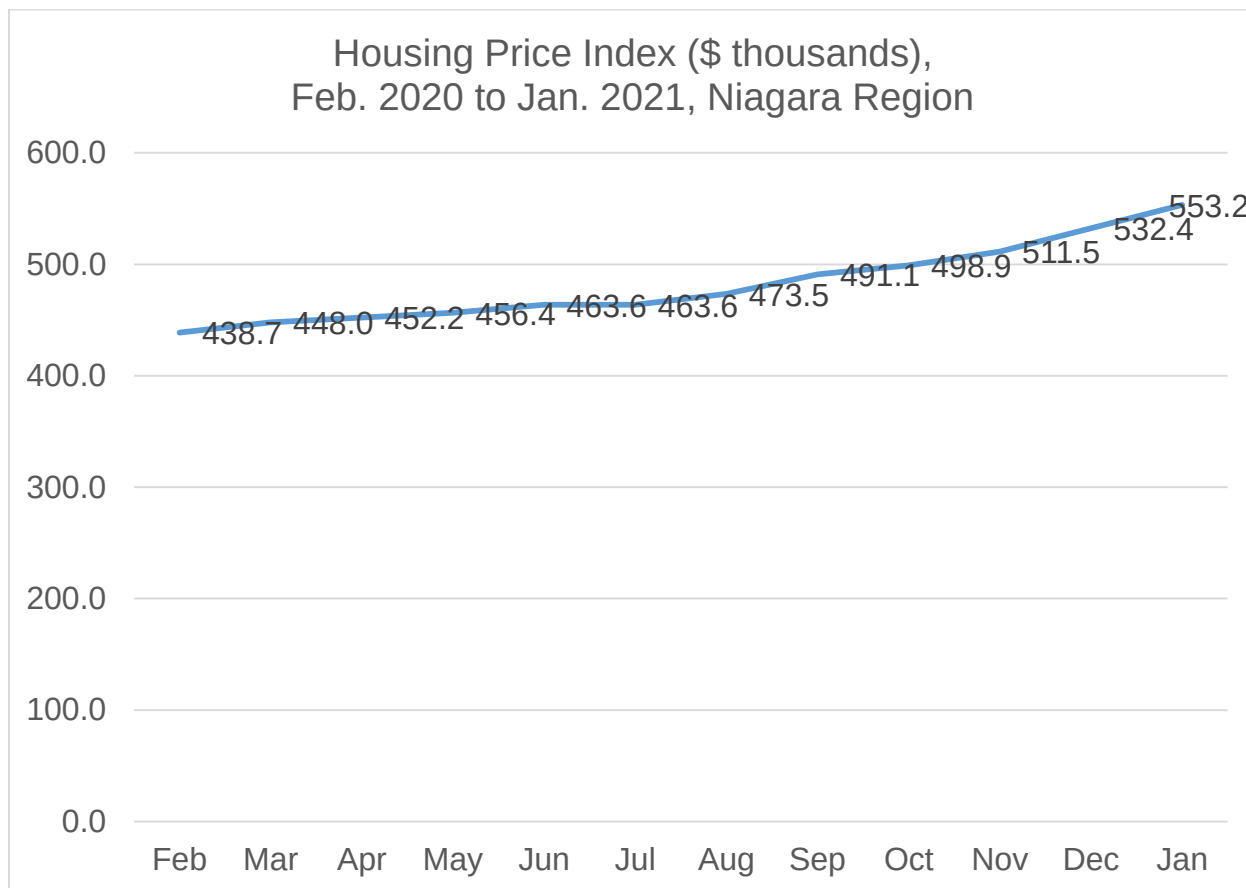
The Conference Board of Canada, Key Economic Indicators, St. Catharines-Niagara

- Household income per capita in Niagara also experienced a significant decline of \$1,617 or 4.8% from 2019 to 2020.
- It is forecasted to make a rapid recovery in 2021 with significant growth for 2022 and 2023.



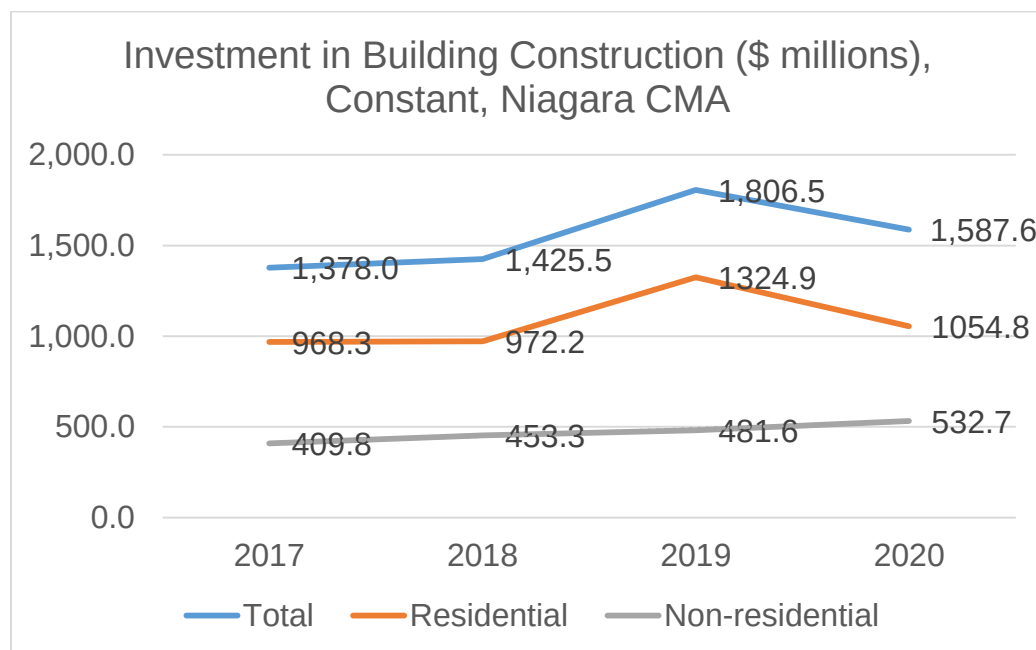
The Conference Board of Canada, Key Economic Indicators, St. Catharines-Niagara

- Consumer Price Index is a measurement of inflation. It remained stable from 2019 to 2020.
- It is forecasted to increase again in 2021 to 2023, and the cost of living is forecasted to increase by 6.1% from 2020 to 2023 compared to 5.1% increase from 2017 to 2020.



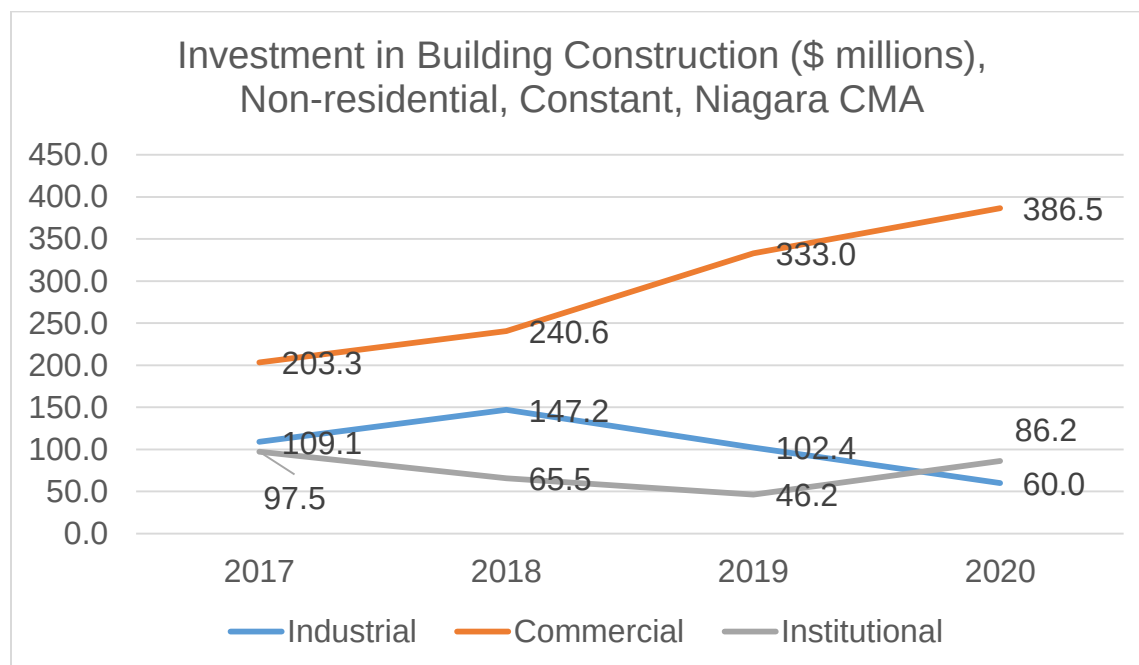
Niagara Real Estate Association

- Similar in concept to the consumer price index (CPI), the housing price index (HPI) measures the rate that housing prices change over time.
- Niagara benchmark housing price grew by \$114,500 or 26% from February 2020 to January 2021.



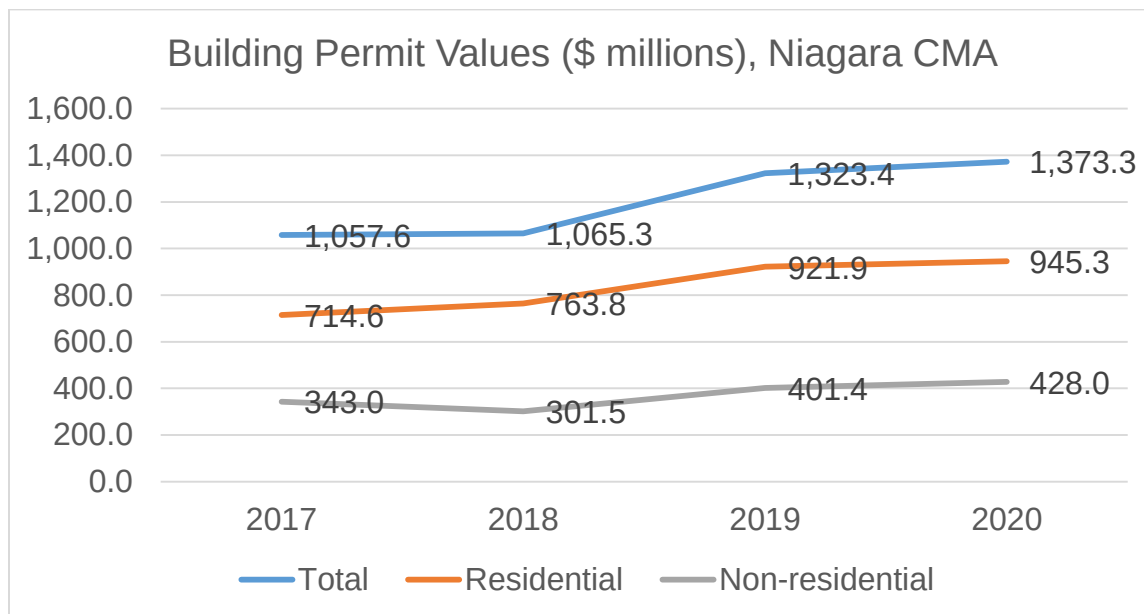
Statistics Canada, Table: 34-10-0175-01

- Despite COVID-19, investment in building construction in Niagara remained strong in 2020.
- Although total investment was down \$218.9 million or 12.1% in 2020, 2019 was a banner year and 2020 was still historically very strong.
- Investment in residential building construction was down \$270.1 million or 20%, but investment in non-residential building construction was actually up \$51.2 million or 10.6%.



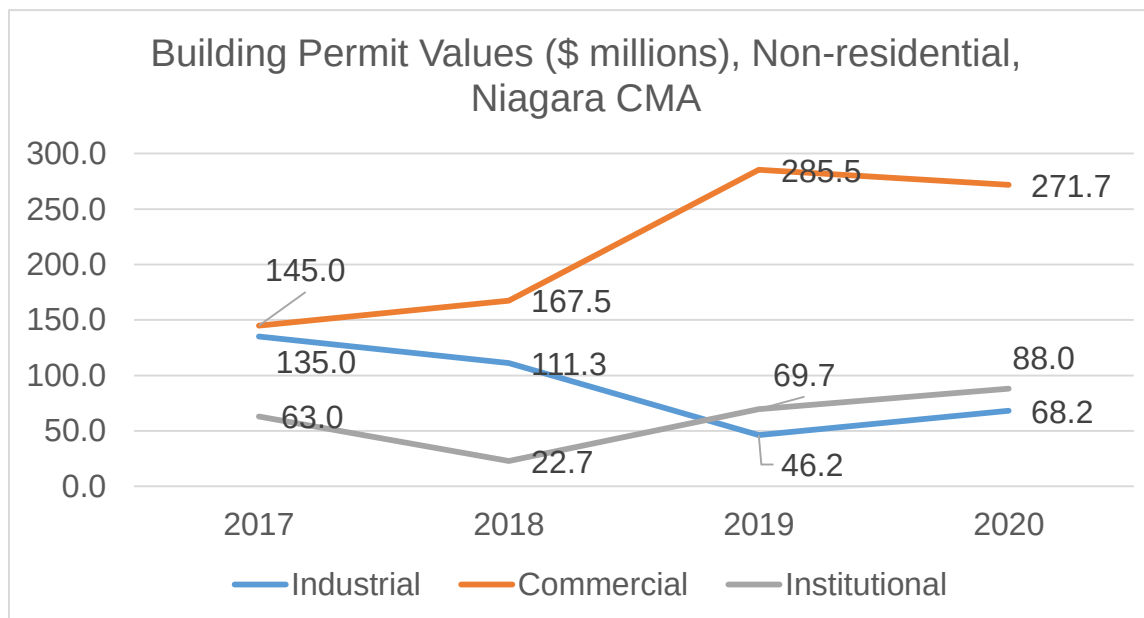
Statistics Canada, Table: 34-10-0175-01

- From 2019 to 2020, investment in commercial building construction grew by \$53.6 million or 16.1%.
- Investment in industrial building construction experienced a significant decline of \$42.4 million or 40%.
- Investment in institutional building construction grew by \$40.0 million or 86.5%.



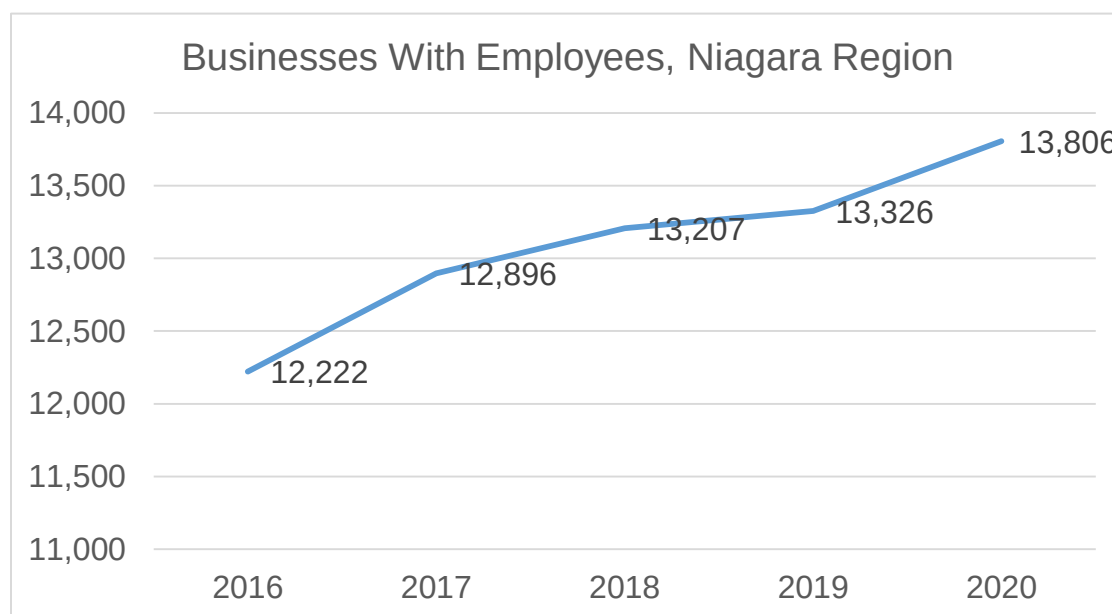
Statistics Canada, Table: 34-10-0066-01

- Building permit values for Niagara remained strong in 2020 at \$1.4 billion, which was \$50 million over 2019 or 3.8%.
- Residential building permit values grew by \$23.4 million or 2.5%, while non-residential building permit values grew by \$26.6 million or 6.6%.



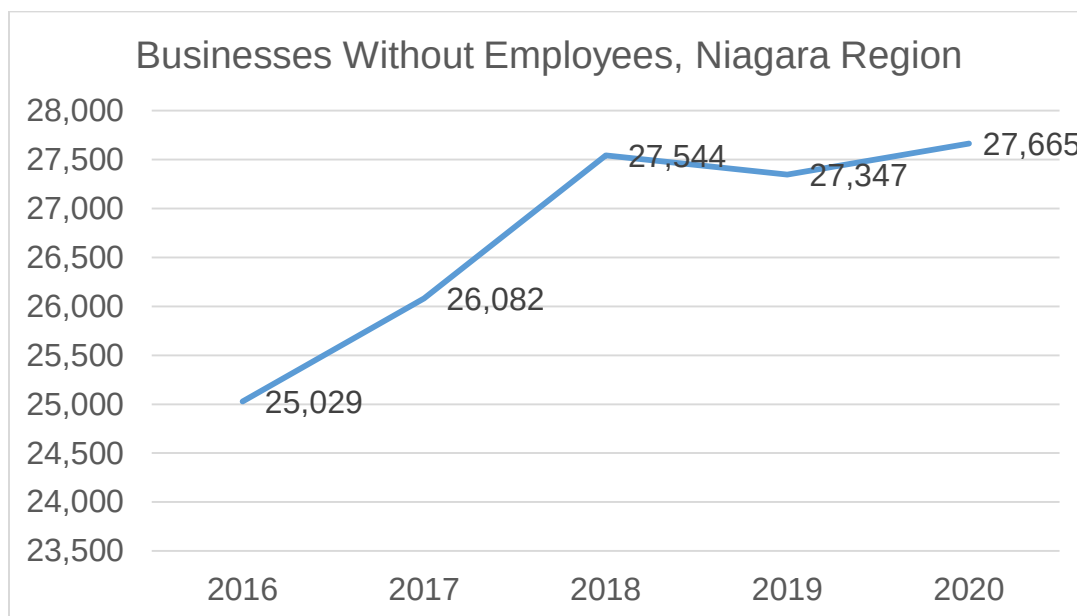
Statistics Canada, Table: 34-10-0066-01

- From 2019 to 2020, non-residential building permit values remained strong across all building types.
- Although commercial building permit values experienced a slight decline of \$13.8 million or 4.8%, industrial building permit values grew by \$22 million or 4.8%, and institutional building permit values grew by \$18.4 million or 26.4%.



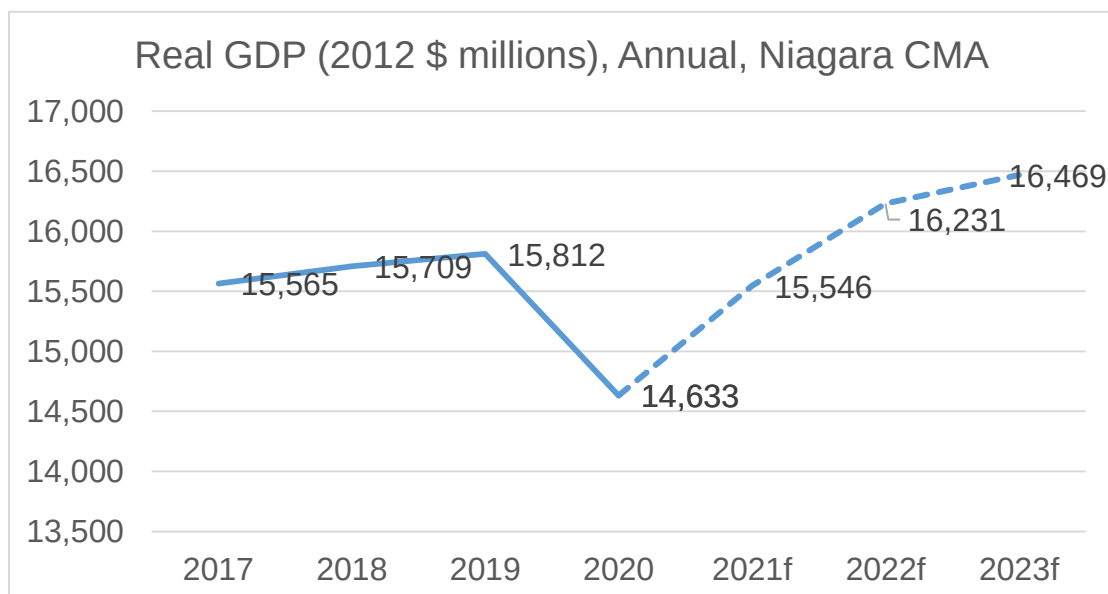
Statistics Canada, Canadian Business Counts

- From 2019 to 2020, Niagara actually gained 480 businesses with employees.
- However, it is important to note that this is not an accurate reflection of the impact of COVID-19 on business counts given the fluidity of the situation and lag in data collection. This data was collected before businesses may have closed as a result of the pandemic. This will eventually be reflected in the data as more is collected.



Statistics Canada, Canadian Business Counts

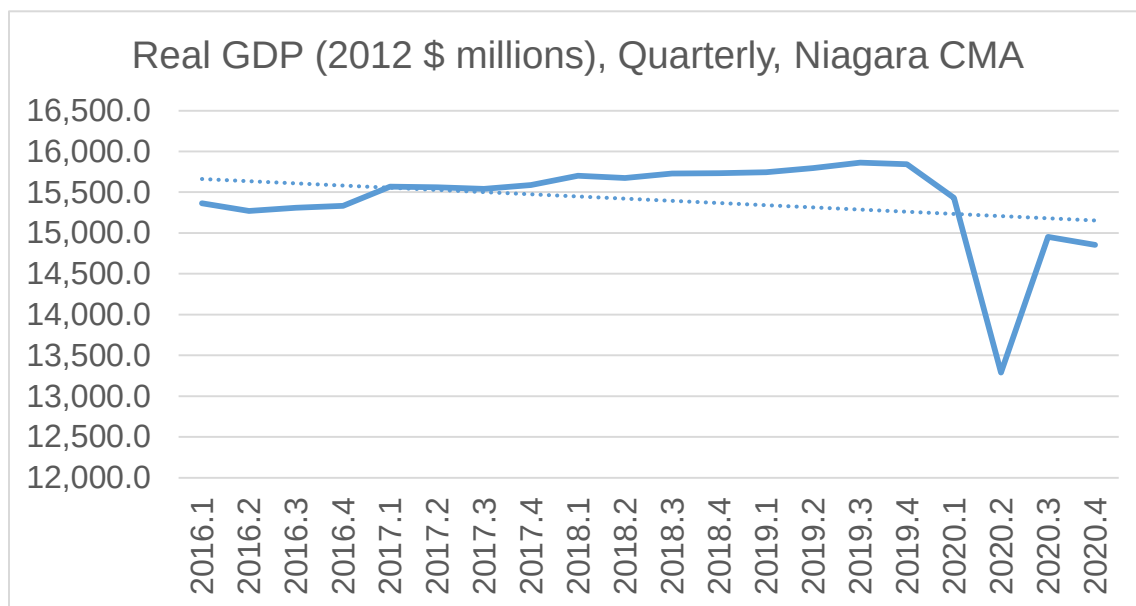
- From 2019 to 2020, Niagara gained 318 businesses without employees.
- However, as mentioned above, the impacts of the pandemic are not yet reflected in this data.



The Conference Board of Canada, Key Economic Indicators, St. Catharines-Niagara

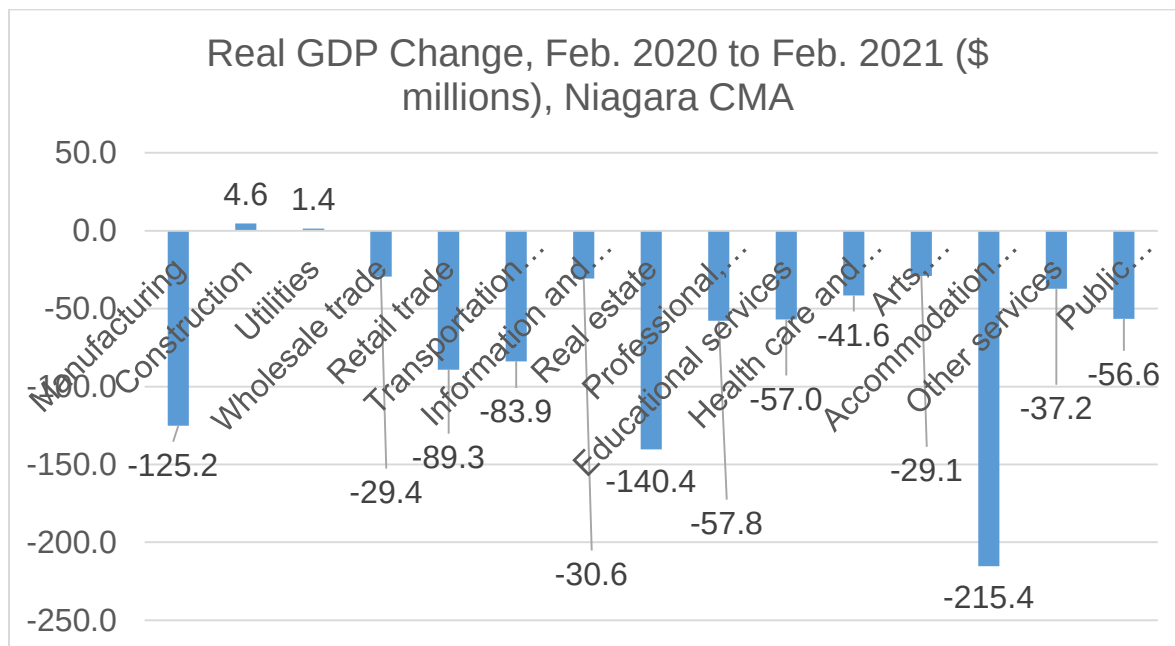
- Real GDP experienced a drastic decline in 2020 of \$1.2 billion or 7.5%. This indicates a massive loss of productivity in the regional economy in 2020.

- For comparison sake, Niagara's GDP declined by \$440.0 million or 3.1% during the Great Recession in 2008 and 2009.
- However, since the current economic downturn is self-imposed due to the pandemic, GDP is forecasted to rebound quickly by 2022.



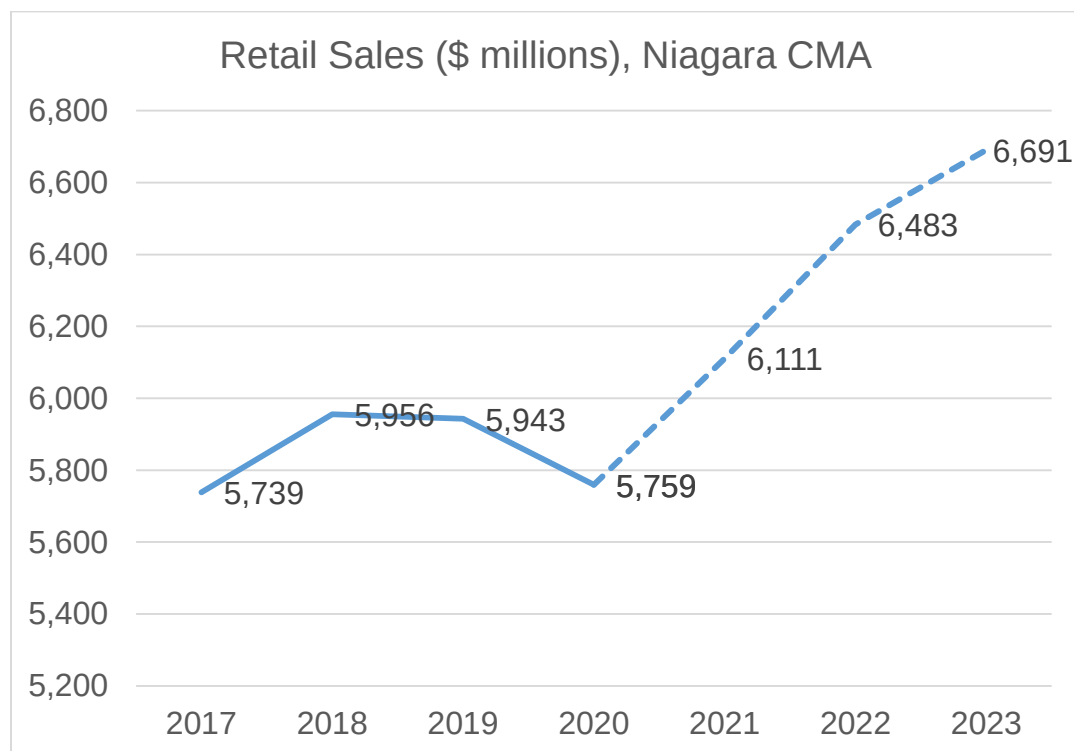
The Conference Board of Canada, GDP at Basic Prices, St. Catharines-Niagara

- Real GDP was strong going into 2020, but experienced a significant decline in Q1 and Q2 in 2020 where GDP declined by \$2.6 billion or 16%.
- GDP rebounded in Q3 of 2020, but then began to decline again in Q4 2020. This is a reflection of the impact of the COVID-19 lockdown measures and other COVID-19-related disruptions on the regional economy.



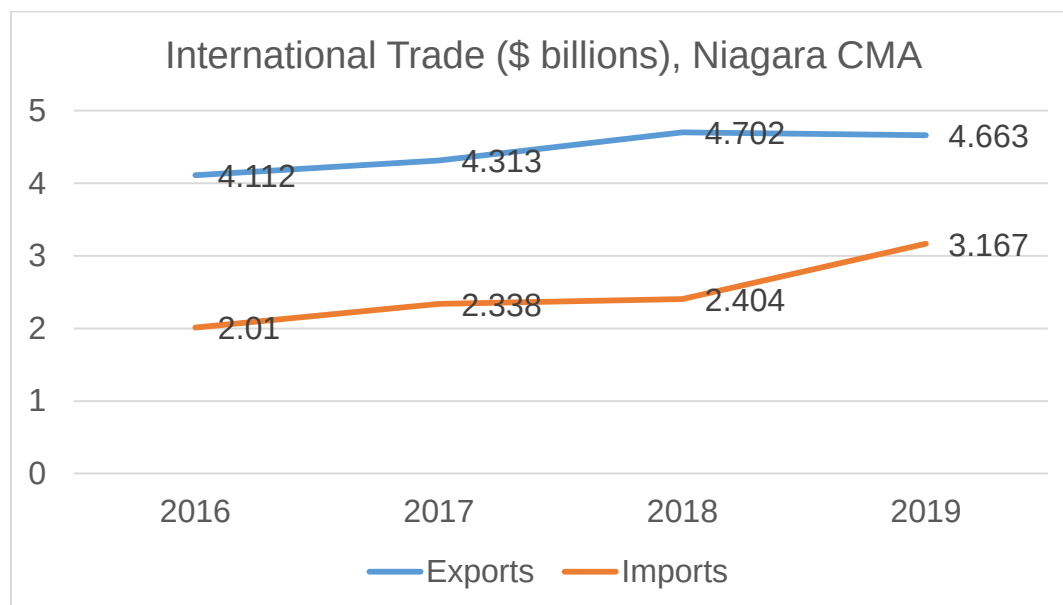
The Conference Board of Canada, GDP at Basic Prices, St. Catharines-Niagara

- From February 2020 to February 2021, all sectors lost GDP except for construction and utilities.
- Although some sector like manufacturing; real estate, rental and leasing; professional, scientific and professional services; and finance and insurance gained employment during this period, they still lost GDP, which is a reflection of the loss of productivity and/or market opportunities for these industry sectors in 2020.
- Accommodation and food services was impacted significantly harder than other industry sectors with a \$215.4 million in lost GDP.



The Conference Board of Canada, Key Economic Indicators, St. Catharines-Niagara

- Retail sales stagnated in Niagara in 2019 and then experienced a significant decline in 2020 of \$183.7 million or 3.1% in 2020.
- Given the pent up household disposable income, retail sales are forecasted to make a strong rebound in 2021 of \$351.0 million or 6.1% with substantial growth into 2023.



Statistics Canada, Trade in Goods by Exporter and Importer Characteristics

- In 2019, Niagara had a strong position in international trade with \$4.7 billion in export values, \$3.2 billion in import values, and a trade balance of \$1.5 billion.
- The 2020 figures are not yet available, but international trade will be an important component of Niagara's post-pandemic economic recovery.

Conclusion

- Niagara's population continues to grow despite the pandemic with a continued growth trajectory.
- All labour indicators show that the pandemic is having a major negative impact on workers. 24,200 people in Niagara became unemployed during the pandemic with disproportionate affects on the youth (15 to 24 years) and female demographic.
- Prior to the pandemic, employers in Niagara had challenges recruiting and retaining employees. The pandemic may exacerbate this problem with more people not participating in the labour force.
- Accommodation and food services; retail trade; and, information, arts, culture and recreation saw much greater employment losses compared other sectors.
- Many sectors actually gained employment despite a loss in sector GDP. This indicates that relief programs such as Canada Emergency Wage Subsidy (CEWS) were effective at helping companies retain and grow their workforces

despite market challenges and a decline in productivity due to lockdowns, supply chain disruptions, etc.

- Total household income declined significantly while household disposable income actually grew by \$1.2 billion. This indicates that while many people lost income, those who retained income saved a significant amount of disposable income. This will help by providing an influx of capital into the economy when it reopens.
- Household income per capita reflect the true loss of income to the individual. This is forecasted to improve drastically once the economy is able to reopen and people in the hardest hit sectors are able to return to full employment.
- While inflation has remained relative stable from 2019 to 2020, it is forecasted to increase going forward, which will increase the cost of living.
- Housing prices in Niagara are also increasing at an astounding rate. Over the past year, prices increased on average by \$114,500 or 26%. This is the largest year-over-year increase on record. This is presenting many challenges in Niagara as incomes are not keeping pace and Niagara residents will struggle to be able to afford home ownership and housing.
- Despite the pandemic, investment in building construction, as well as building permit values remain very strong indicating that there is strong market demand for Niagara real estate.
- Business counts in Niagara remain stable, but this could change as business bankruptcies and closures are reflected in the data going forward.
- Real GDP in Niagara declined drastically with the onset of COVID-19. This is a result of the loss of productivity in almost all sectors in Niagara other than construction and utilities. The service-oriented sectors experienced the largest decline.
- Retail sales also declined significantly as a result of COVID-19 lockdowns, but is forecasted to recover rapidly and remain very strong into 2023 given the high level of pent up capital in the regional economy.
- International trade remained strong in 2019. The figures are not yet available for 2020, but given the loss in GDP and productivity, it is expected that international trade has also declined.

Alternatives Reviewed

None applicable.

Relationship to Council Strategic Priorities

This report supports the following Council Strategic Priority because it is essential to be aware of and understand the characteristics of Niagara's regional economy in order to make informed decisions pertinent to business and economic growth:

- Supporting Businesses and Economic Growth

Other Pertinent Reports

- ED 16-2020 Niagara Economic Update
- ED 8-2021 COVID-19 Response and Business Continuity in Economic Development
- ED 5-2021 Economic Recovery Plan Update 3

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Director
Economic Development*

Submitted by:

*Ron Tripp, P.Eng.
Acting Chief Administrative Officer*

Appendices

None applicable.

Students Going Digital

The Economic Impact on Niagara

Planning and Economic Development Committee

ED10 - 2021

April 14, 2021

Vivian Kinnaird, CEO and Kevin McPhillips, Research Associate
Niagara Workforce Planning Board



NIAGARA **WORKFORCE** **PLANNING BOARD**

Students Going Digital – the economic
impact on Niagara

Kevin McPhillips

February 2021

Project Overview

- COVID-19 forced post-secondary institutions to shift many programs to a virtual model, greatly impacting the Niagara region
- A decline in enrollment and increased ability to remain at-home while studying virtually led to a significant decrease in post-secondary students living in Niagara

This project quantifies the subsequent economic effect through the lens of post-secondary education in Niagara

Project Overview

This economic analysis is broken into four sections

- The first assesses the decrease in rental property demand;
- The second provides an overview of COVID-19's impact on Niagara's public transit system;
- The third measures the pandemic's impact on localized student spending, and
- The fourth outlines the impact on labour supply in both work-integrated learning placements and employment.

Rental Property Demand

- COVID-19 led to a decrease of between 1,713 and 2,544 students renting a housing unit, a year-over-year decrease of 13.8% to 20.5%

Original Demand	Demand Decrease	Corresponding 2020 Demand	Difference in post-secondary renters
12,411	13.8%	10,698	-1,713
	20.5%	9,867	-2,544

- We also saw a decrease of 2,941 to 4,369 fewer students living in Niagara during the 2020-21 school year, representing a decrease of 23.7% to 35.2%

Original Demand	Decrease in Renters Living in Niagara	Corresponding 2020 Renters Living in Niagara	Difference in students living in Niagara
12,411	23.7%	9,470	-2,941
	35.2%	8,042	-4,369

Niagara Region Public Transit

- The pandemic has led to a decline in student U-Pass payments of between \$2.9 million and \$3.3 million, a 79.6% decrease relative to 2019-20 totals.

	Lower Revenue Scenario			Higher Revenue Scenario		
Revenue Source	BUSU	NCSAC	Total	BUSU	NCSAC	Total
Pre-pandemic revenue	\$1,500,000	\$2,170,000	\$3,670,000	\$1,700,523	\$2,460,090	\$4,160,612
Fee decrease during pandemic	50%	100%	79.6%	50%	100%	79.6%
Pandemic revenue	\$750,000	\$0	\$750,000	\$850,261	\$0	\$850,261
Decrease in revenue due to pandemic	\$750,000	\$2,170,000	\$2,920,000	\$850,261	\$2,460,090	\$3,310,351

Student Spending in Niagara

- We estimate that local student spending has seen a decrease of between \$2.8 and \$4.8 million monthly, representing 19.0% to 27.8% of pre-pandemic student spending

	Lesser Spending Estimate		Higher Spending Estimate	
	Lesser demand decrease	Higher demand decrease	Lesser demand decrease	Higher demand decrease
Rent cost per month	\$425.00	\$425.00	\$531.00	\$531.00
Rent demand decrease	1,713	2,544	1,713	2,544
Rent payment decrease	\$728,025.00	\$1,081,200.00	\$909,603.00	\$1,350,864.00
Non-rent cost per month	\$706.40	\$706.40	\$782.80	\$782.80
Decrease in renters actively living in Niagara	2,941	4,369	2,941	4,369
Student spending decrease	\$2,077,522.40	\$3,085,555.20	\$2,302,214.80	\$3,419,270.40
Total monthly impact:	\$2,805,547.40	\$4,166,755.20	\$3,211,817.80	\$4,770,134.40
Total yearly impact	\$25,356,479.20	\$37,658,841.60	\$29,332,954.40	\$43,564,531.20

Student Employment

- The pandemic led to an estimated decrease in Niagara's GDP output of between \$37.1 and \$47.7 million due to a lack of student labour supply in the region.
- These totals suggest a decline between 15.8% and 20.3% of pre-pandemic student-driven GDP output.

	Low-impact estimate	High-impact estimate
Decrease in FTE students employed due to the pandemic	950.5	1221.2
GDP output per FTE employee, Niagara, 2019	\$41,076.71	
Total training cost savings	\$1,898,688.00	\$2,439,886.00
Net impact on GDP output	\$37,135,428.36	\$47,711,048.14

Work-Integrated Learning

- Our data suggests that the pandemic decreased Niagara's GDP output by \$39.0 million due to a lack of student work-integrated learning placements within the region. This total suggests a reduction in work-integrated learning economic output of 32.2%.

	2020-21 Estimates
GDP output per WIL student, St. Catharines-Niagara CMA	\$12,965.78
Decrease in WIL students due to COVID-19	3,006
Total expected decrease in GDP output	\$38,975,134.68

Effects outside the scope of this paper

- While this report provides insight into the economic impacts of virtual post-secondary education, other impacts that may be valuable to assess in future research include:
- Staff layoffs,
- Future capital expenditures placed on hold due to a lack of cash flow, and
- The loss of future localized earnings from students who may have remained in Niagara post-graduation had they physically lived within the region in 2020

Overall Project Findings

- In total, this report suggests that the impact from the pandemic related to direct student engagement in Niagara's economy over the course of the 2020-2021 school year is between \$104.4 million and \$133.6 million.
- This range represents a relative reduction in post-secondary student economic output of between 21.2% and 25.8% compared to pre-pandemic estimates.

			U-Pass	Student Spending	GDP Output, Student Employment	GDP Output, WIL Engagement	Total
Estimated Decrease	Low-Impact	2019	\$3,670,000	\$133,433,143	\$235,099,655	\$121,031,096	\$493,233,895
		2020	\$750,000	\$108,076,664	\$197,964,227	\$82,055,961	\$388,846,852
		Total Decrease	\$2,920,000	\$25,356,479	\$37,135,428	\$38,975,135	\$104,387,043
	High-Impact	2019	\$4,160,612	\$156,805,538	\$235,099,655	\$121,031,096	\$517,096,902
		2020	\$850,261	\$113,241,007	\$187,388,607	\$82,055,961	\$383,535,836
		Total Decrease	\$3,310,351	\$43,564,531	\$47,711,048	\$38,975,135	\$133,561,066

Thank you

Contact us:

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Kevin McPhillips – kevin@nwpb.ca

Subject: Students Going Digital: The Economic Impact on Niagara

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 14, 2021

Recommendations

1. That Report ED 10-2021 **BE RECEIVED** for information.

Key Facts

- Niagara Economic Development contracted Niagara Workforce Planning Board to assess the economic impact of Niagara's post-secondary institutions shifting to a more virtual setting for the 2020-21 academic year.
- Economic impact was measured through the lens of the Niagara rental market, public transit ridership revenue, student spending in Niagara, and available labour supply.
- In total, this report suggests that the economic impact from the pandemic directly related to student engagement in Niagara's economy throughout the 2020-21 school year is between \$104.4 and \$133.6 million.
- This total represents an overall decline between 21.2% and 25.8% in post-secondary student economic engagement.

Financial Considerations

All financial implications of contracting with the Niagara Workforce Planning Board to complete this research, as an action within the Economic Recovery Plan, are being funded by the operational budget of the Economic Development division

Analysis

The COVID-19 pandemic forced post-secondary institutions to shift many programs to a virtual model, greatly impacting the Niagara region given the presence of both Niagara College and Brock University. Though certain aspects of the post-secondary experience remained in-person, declining enrollment and the ability to remain at-home while studying virtually led to a significant decrease in post-secondary students living in Niagara. Considering this, Niagara Workforce Planning Board was contracted to present

data identifying the subsequent economic effect through the lens of post-secondary education in Niagara.

Economic impact was measured through four lenses:

1. The Niagara rental market;
2. Public transit ridership revenue;
3. Student spending in Niagara, and
4. Available labour supply.

To estimate these impacts, sources included local survey data, previous reports on post-secondary economic impacts, and data from a range of sources including Statistics Canada and the Conference Board of Canada to analyze these impacts. Findings from this report estimate that the pandemic resulted in:

- A decrease of between 1,713 and 2,544 students renting a housing unit and 2,941 and 4,369 fewer students living in Niagara during the 2020-21 school year;
- A decline in student U-Pass payments of between \$2.9 million and \$3.3 million;
- A decrease in local student spending of between \$2.8 and \$4.8 million monthly, adjusted to between \$25.4 and \$43.6 million over the course of one year;
- A decrease in Niagara's GDP output of between \$37.1 million and \$47.7 million due to a lack of student labour supply in the region; and
- A decrease in Niagara's GDP output of \$39.0 million due to a lack of student work-integrated learning placements within the region.

Certain economic impacts were not included in this report, including staff layoffs, future capital expenditures placed on hold due to a lack of cash flow, and the loss of future localized earnings from students who may have remained in Niagara post-graduation had they physically lived within the region in 2020. Though these factors will have an economic ripple effect on Niagara over the short- to long-term, their direct economic impact is either outside the scope of this project or cannot currently be measured.

In total, this report suggests that the economic impact from the pandemic directly related to student engagement in Niagara's economy throughout the 2020-21 school year is between \$104.4 and \$133.6 million. This total represents an overall decline between 21.2% and 25.8% in post-secondary student economic engagement. It should be reiterated that this does not suggest that this represents the total impact of Brock University and Niagara College, or the entirety of the decreased impact from student engagement to Niagara due to the pandemic. It should be seen as the impact *from the*

data Niagara Workforce Planning Board measured, fully understanding there are a number of realities outside the scope of this project (most notably staff layoffs).

Alternatives Reviewed

None applicable.

Relationship to Council Strategic Priorities

This research, which is an action within the ERRT Economic Recovery Plan, supports Council Strategic Priority “Supporting Businesses and Economic Growth”.

Other Pertinent Reports

ED 11-2020 Economic Recovery Plan Update
ED 15-2020 Economic Recovery Plan Update 2
ED 5-2021 Economic Recovery Plan Update 3

Prepared by:

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Associate Director
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Recommended by:

George Spezza, Ec.D., CEcD
Director
Economic Development

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Vivian Kinnaird, Chief Executive Officer and Kevin McPhillips, Research Associate, Niagara Workforce Planning Board.

Appendices

Appendix 1 Students Going Digital 2020-2021 Report, Niagara Workforce Planning Board

Students Going Digital: the economic impact on Niagara

Prepared for: Niagara Economic Development



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Executive Summary

The COVID-19 pandemic forced post-secondary institutions to shift many programs to a virtual model, greatly impacting the Niagara region given the presence of both Niagara College and Brock University. Though certain aspects of the post-secondary experience remained in-person, declining enrollment and the ability to remain at-home while studying virtually led to a significant decrease in post-secondary students living in Niagara. Considering this, the purpose of this paper is to present data identifying the subsequent economic effect through the lens of post-secondary education in Niagara.

Economic impact was measured through the lens of the Niagara rental market, public transit ridership revenue, student spending in Niagara, and available labour supply. To estimate these impacts, sources included local survey data, previous reports on post-secondary economic impacts, and data from a range of sources including Statistics Canada and the Conference Board of Canada to analyze these impacts. Findings from this report estimate that the pandemic resulted in:

- A decrease of between 1,713 and 2,544 students renting a housing unit and 2,941 and 4,369 fewer students living in Niagara during the 2020-21 school year;
- A decline in student U-Pass payments of between \$2.9 million and \$3.3 million;
- A decrease in local student spending of between \$2.8 and \$4.8 million monthly, adjusted to between \$25.4 and \$43.6 million over the course of one year;
- A decrease in Niagara's GDP output of between \$37.1 million and \$47.7 million due to a lack of student labour supply in the region; and
- A decrease in Niagara's GDP output of \$39.0 million due to a lack of student work-integrated learning placements within the region.

While this report provides insight into the economic impacts of virtual post-secondary education, other impacts that may be valuable to assess in future research include:

- Staff layoffs,
- Future capital expenditures placed on hold due to a lack of cash flow, and
- The loss of future localized earnings from students who may have remained in Niagara post-graduation had they physically lived within the region in 2020

Though these factors will have an economic ripple effect on Niagara over the short- to long-term, their direct economic impact is either outside the scope of this project or cannot currently be measured and are therefore not part of this project's calculations.

In total, this report suggests that the economic impact from the pandemic directly related to student engagement in Niagara's economy throughout the 2020-21 school year is between \$104.4 and \$133.6 million. This total represents an overall decline between 21.2% and 25.8% in post-secondary student economic engagement.



Introduction

This report looks to assess the economic impact of Niagara's post-secondary institutions shifting to a more virtual setting for the 2020-21 academic year. Though certain in-person activities have remained, the majority of coursework has taken place online. Moreover, enrollment rates have declined this year, as students have delayed their post-secondary education until after the pandemic. Due to this reality, many students who would otherwise be moving to Niagara are instead remaining at home.

Previous reports have suggested that prior to the pandemic Brock University and Niagara College each contributed between \$257.4 and \$807 million annually to the Niagara region's economy.¹ These estimates vary due to different aspects of output being measured and a reliance on different economic multipliers. Though the range is broad, it is nevertheless quite clear that both post-secondary institutions are regional economic drivers. As such, the Niagara region will undoubtedly see negative economic consequences of this pandemic-driven shift to virtual education. It is the goal of this paper to provide estimates regarding the economic effect of the pandemic forcing these institutions into a virtual environment. This shortened version of the full report focuses more heavily on the final results rather than the calculations specific to each figure. For a more detailed breakdown of the methodologies and calculations used in this report please refer to the full report.

This paper will be assessing four facets of economic activity typically impacted by post-secondary students. First, we will assess the decrease in rental property demand that has resulted due to the pandemic. Second, this report will provide an overview of the impact on Niagara's public transit system. Third, we will measure the pandemic's impact on localized student spending. Fourth, we will outline the changes to labour supply and the subsequent impact to regional GDP output by estimating the decline in work-integrated learning placements as well as employment by industry.

The fifth section of this report will note economic considerations outside the scope of this paper, including staff layoffs, future capital expenditures, and the loss of future localized earnings from students who may have remained in Niagara post-graduation. Though these factors will have an economic ripple effect on Niagara over the short- to long-term, for a number of reasons expounded upon in section five, they remain outside the purview of this analysis. Finally, this paper will conclude with an overall synopsis of the pandemic's impact on economic activity in Niagara.

¹ This paper is distinct from these prior reports and the financial estimates are not comparable. Though this assessment touches upon specific aspects of their findings, the scope of each is different, and each measure different aspects of economic engagement. The figures within this paper are a result of the specific measurements we engaged with and are unique to this report.



Section 1 – Niagara's Rental Market

The impact to the local residential rental market has been abrupt, resulting in serious negative consequences for Niagara's rental property owners. This section uses survey data from local rental property owners as well as Niagara's post-secondary students to estimate demand for rental units during the pandemic. Using previous research, this section will also establish a baseline estimate of rental demand during pre-pandemic years, to measure the estimated demand decrease due to COVID-19.

Section 1.1 Rental Unit Survey Data

In a survey of rental property owners in Niagara from November 2020, 367 of their total 1,647 (22.3%) units were listed as currently available. This compares to only approximately 30 units (1.8%) being unfilled at this time during a "typical" November, an increase of 20.5% in unfilled units. We further identified that 64.3% of student renters were actively living in Niagara compared to a typical, pre-pandemic year. Considering that 77.7% of rooms were filled, that suggests an additional 13.4% of renters were renting a unit but not actively living in it. Though students who are renting a unit but living elsewhere would still be obligated to pay their rent, they would not be spending money, working, or be otherwise engaged in the Niagara economy.

A separate survey of 923 Niagara post-secondary students asking about their living arrangements show relatively similar declines, though not as extreme. Compared to 2019, these survey data show a decrease of 13.8% in demand for off-campus housing in Niagara during the 2020 fall semester (compared to the 20.5% decrease seen by extrapolating the property owners' data to the entire sector). The remainder of this report will consider these figures to be estimates providing a low- and high- end projection of the impact of the pandemic on Niagara's rental market. Table 1.1 presents these survey response data.

Table 1.1 Expected number of filled and unfilled rooms, compared to actual 2020 data, Niagara property owners and student survey response data

	Property Owners Data			Student Survey Data		
	2019	2020	Change	2019	2020	Change
Filled Rooms	98.2%	77.7%	-20.5%	100%	86.2%	-13.8%
Unfilled Rooms	1.8%	22.3%	20.5%	0%	13.8%	13.8%
Renters Actively Living in Units	100%	64.8%	-35.2%	100%	76.3%	-23.7%²

² The student survey did not ask whether students renting properties were planning to live in these accommodations. We chose to imply that the difference between this data and the property owner data would be similar to the difference in "filled room" expectations.



Section 1.2 The Impact of Niagara's Student Rental Demand Decrease

Previous reporting by Brock University and Niagara College indicated that in a typical year 39.0% of Niagara's post-secondary students reside off-campus, away from home, and within Niagara. Applying this percentage to 2019 enrollment data suggests that 12,411 of Niagara's 31,792 post-secondary students rented an off-campus housing unit during 2019. This section is only concerned with the rental market in Niagara and will therefore focus on these 12,411 students. Table 1.2 presents these estimates.

Table 1.2 2019 estimates of Niagara post-secondary students housing arrangements

Living Status	2019 Estimates	Percentage of Total
On-campus residence	2,875	9.0%
Off-campus in Niagara	12,411	39.0%
At home	16,506	51.9%
Total	31,792	100.0%

Tables 1.3. and 1.4 apply the scenarios from Table 1.1 to the estimated 2019 rental demand to present the potential change in rental unit demand and students actively living in Niagara. As can be seen, in the most dire estimate, 2,544 fewer students were looking for rental units in 2020 compared to 2019. Moreover, in this scenario, an additional 1,825 renters were not living in their rented unit, resulting in a total decrease of 4,369 post-secondary students living in Niagara compared to pre-pandemic totals.

Table 1.3 Estimated rental unit demand decrease in 2020 due to the pandemic

Original Demand	Demand Decrease	Corresponding 2020 Demand	Difference in post-secondary renters
12,411	13.8%	10,698	-1,713
	20.5%	9,867	-2,544

Table 1.4 Estimated decrease in post-secondary students living in Niagara in 2020

Original Demand	Decrease in Renters Living in Niagara	Corresponding 2020 Renters Living in Niagara	Difference in students living in Niagara
12,411	23.7%	9,470	-2,941
	35.2%	8,042	-4,369

These figures place a significant burden on Niagara's property owners and have left many in a precarious situation. One organization stressed that they were dealing with major financial constraints and that unlike other businesses and citizens, they had not been able to access government supports. As income from rental properties dwindles due to COVID-19, the property owner argued there would be two specific outcomes:

- First, many property owners, large and small, will be forced to sell properties;
- Second, for those who retain their properties, rent will have to be raised considerably, pushing the cost of renting in Niagara significantly higher for "the next three to four years, at a minimum."



Section 2 – Student Public Transit Ridership in Niagara

Niagara's post-secondary students are eligible for a universal bus pass (U-Pass) through negotiated agreements with Niagara's local transit operators; for a mandatory fee, students gain access to busses operating throughout the Niagara region. During the pandemic, however, these fees have been reduced. This section estimates the subsequent decrease in revenue generated through U-Passes as a result of COVID-19.

Section 2.1 Pre-pandemic U-Pass revenue

To calculate the revenue generated by U-Pass agreements prior to the onset of the pandemic we assessed regional transit reports to the Niagara Region Public Works Committee alongside estimates provided by Niagara Regional Transit officials. To begin, a report to the Public Works Committee, *Niagara Regional Transit Service Expansion Update*, dated October 8, 2019, suggests that overall funding for NRT received from negotiations with Niagara College, Brock University, and their respective student unions is approximately \$3.67 million.³ These data are presented in Table 2.1.

Table 2.1 2019 NRT Revenue attributable to U-Pass agreements, October 8, 2019 report estimates

	Brock Student Fees Revenue	Niagara College Student Fees Revenue	Total Revenue from U-Pass Agreement, NRT
Pre-Pandemic	\$1,500,000	\$2,170,000	\$3,670,000

To validate this data we received estimates from Niagara Region Transit Services officials. In 2019, according to a March 10, 2020 report to the Niagara Region's Public Works Committee, the Region's share of revenue for NRT grew to \$4,894,838. In consultations, officials suggested that "close to 85% [of this 2019 revenue] was from the U-Pass agreements," resulting in approximately \$4,160,612 in revenue being attributable to U-Pass agreements. These data are presented in Table 2.2.

Table 2.2 2019 NRT Overall revenue attributable to U-Pass agreements, March 10, 2020 estimates

	NRT Revenue	Approximate percentage of revenue attributable to U-Pass	Revenue Attributable to U-Pass Agreements
Pre-Pandemic	\$4,894,838	85%	\$4,160,612

Acknowledging that these figures are estimates, we will rely on these data as the range of potential pre-pandemic revenue generated by U-Pass agreements. As such, we expect that between \$3.7 million and \$4.2 million was generated by U-Pass agreements prior to the pandemic.

³ This estimate is derived from a series of calculations based on data within the committee report. For a detailed breakdown of how we arrived at this total, please see our full report.



Section 2.2 Assessing the impact of the COVID-19 pandemic on U-Pass revenue

As revenue agreements are negotiated between Niagara College, Brock University, their respective student unions, and Niagara Regional Transit alongside other local transit partners, definitive assessments of the impact of the pandemic on U-Pass revenue is unattainable at this time. However, information is available regarding the costs passed on from student unions to the students of Brock University and Niagara College. By applying those revenue decreases to the pre-pandemic figures assessed in Section 2.1, we can estimate the potential losses incurred during the pandemic.

To begin, Niagara College students are not being charged any U-Pass fee for either semester during the pandemic, while Brock University students are only being charged 50% of the traditional fee. To translate these net decreases to financial totals, we must separate the revenue estimates from Section 2.1 to account for each post-secondary institution's respective portions.

Table 2.1 noted that \$2.17 million of the \$3.67 million (59.1%) total revenue was attributable to Niagara College's students. As we do not have a breakdown per institution for the data presented in Table 2.2, we will apply this same ratio to that data. Table 2.3 then applies the expected revenue decreases noted above to the two pre-pandemic U-Pass revenue estimates to measure possible outcomes regarding the total economic impact of the pandemic on U-Pass revenue.

Table 2.3 Estimated U-Pass revenue decrease due to the pandemic

Revenue Source	Lower Revenue Scenario			Higher Revenue Scenario		
	BUSU	NCSAC	Total	BUSU	NCSAC	Total
Pre-Pandemic Revenue	\$1,500,000	\$2,170,000	\$3,670,000	\$1,700,523	\$2,460,090	\$4,160,612
Pandemic Decrease	50%	100%	79.6%	50%	100%	79.6%
Pandemic Revenue	\$750,000	\$0	\$750,000	\$850,261	\$0	\$850,261
Revenue Decrease	\$750,000	\$2,170,000	\$2,920,000	\$850,261	\$2,460,090	\$3,310,351

As can be seen, it is estimated that Niagara College and Brock University students will collectively pay between \$2,920,000 and \$3,310,351 less towards U-Pass fees during the pandemic, a decrease of approximately 79.6% compared to pre-pandemic levels.



Section 3 – Student Spending in Niagara

In an effort to measure the expected monthly expenses of post-secondary students in Niagara, we compared three separate reports on post-secondary spending. The first report is Economic Modelling Specialists Int'l's (EMSI) *Economic Impact Report 2016*, updated in 2018, which measured the local impact of Niagara College. Second, we used a 2018 report produced by the Niagara Community Observatory (NCO) titled *The Brock University Effect: How thousands of students and millions of dollars energize the economy of Niagara Communities*.⁴ Finally, we consulted Maclean's 2018 Student Expenses poll, which surveyed 23,384 Canadian post-secondary students.⁵

Section 3.1 Previous Reports' Estimates

The EMSI Economic Impact report's methodology is proprietary, so only the final figures are known. Meanwhile, the Brock Effect utilized Brock University's fee estimator⁶ as well as the Niagara Poverty Reduction Network's (NPRN) paper *Calculating the Cost of Living in the Niagara Region, 2017*⁷ while the Maclean's Student Expenses poll surveyed 23,384 post-secondary students across Canada.

The findings of each of the three papers were quite similar. The EMSI report calculated that 5,071 students relocated to Niagara in 2014-2015 and collectively spent approximately \$53.3 million locally (approximately \$10,510.7 per student), amounting to monthly spending of \$1,313.8 per student. Comparatively, the NCO report projected students to spend \$1,131.4 per month, while the Maclean's Student Expenses poll projected monthly spending of \$1,257. Table 3.1 presents these spending estimates.⁸

Table 3.1 Prior reports' monthly spending estimates, Niagara's post-secondary students

	Report		
	EMSI Economic Impact Report	Niagara Community Observatory Report	Maclean's Student Survey
Non-Rent Expenses	N/A	\$706.4	\$726.0
Rent	N/A	\$425.0	\$531.0
Total	\$1,313.8	\$1,131.4	\$1,257.0

⁴ Boggs, J. & Peddle, L. Niagara Community Observatory. 2018. *The Brock University Effect: How thousands of students and millions of dollars energize the economy of Niagara Communities*.

⁵ Brown, M. Maclean's Magazine, 2018. Education Hub – Maclean's 2018 Student Survey.

⁶ Brock University Student Accounts & Financial Aid. <https://brocku.ca/safa/undergraduate-fees-estimator/>

⁷ The Niagara Poverty Reduction Network. *Calculating the Living Wage for Niagara Region*, 2017.

⁸ Our references to the data captured in the EMSI Analyst and NCO papers do not use multipliers, our data only measure the gross totals.



Section 3.2 Rental Costs

As Table 3.1 shows, the Niagara Community Observatory (NCO) report projects rent expenses to total approximately \$425 per month (rent, utilities, and laundry)⁹, while the Maclean's student survey suggests total rent expenses average \$531 per month for post-secondary students in Niagara.¹⁰ The authors of the NCO report acknowledge the conservative nature of this estimate, noting that their findings are "based on the most conservative assumptions" as they preferred "to undercount rather than inflate Brock's economic impact".¹¹ Considering this, we will consider the \$425 monthly rent expense as a more conservative estimate of monthly rent expenses for students and the average rent expense of \$531 for a larger spending estimate.

Section 3.3 Non-rent spending estimates

To estimate the conservative spending estimate for non-rent spending, we will again rely on the NCO report's estimates. To address the higher-spending estimate, we will combine the EMSI Economic Impact findings with the Maclean's Student Survey. We have chosen not to rely specifically on the Maclean's Student Survey because it used an average of monthly expenses for students across Canada, rather than expenses specific to Niagara. As such, their data on non-rent expenses are representative of national proportions from a range of Canadian cities and post-secondary institutions.¹² Combining these data allows for us to mitigate potential errors in terms of extrapolating the spending habits of one post-secondary demographic to another.

Section 3.4 Total spending estimates

Table 3.2 combines the low- and high- end estimations regarding non-rent and rent expenses for post-secondary students in Niagara. As reported above, our lesser spending estimate suggests that students in Niagara spend approximately \$706.4 on non-rent expenses and \$425 on rent, for total expenses of \$1,131.4 monthly. In comparison, our higher spending estimate suggests non-rent expenses of \$782.8 per month and \$531.0 on rent, for total student spending of \$1,313.8 monthly.

Table 3.2 Adjusted monthly spending estimates, Niagara post-secondary students¹³

	Lesser spending estimate	Higher spending estimate
Non-Rent Expenses	\$706.4	\$782.8
Rent	\$425.0	\$531.0
Total	\$1,131.4	\$1,313.8

⁹ Boggs, J. & Peddle, L. *The Brock University Effect*. Page 9.

¹⁰ Maclean's Magazine. Education Hub - Maclean's University Guide 2018: Build Your Own Ranking.

¹¹ Boggs, J. & Peddle, L. *The Brock University Effect*. Page 4.

¹² While this amalgamation is not ideal, given the data constraints outlined and the need to separate non-rent and rent expenses to calculate economic impact, we feel that this procedure is acceptable.

¹³ As in Section 1, expenses accrued by students living at home are not measured here, because a shift to virtual learning will not change their living situation.



Referring to the data presented in Section 1, it was estimated that between 2,941 and 4,369 fewer post-secondary students are *living* off-campus in Niagara, and of that group between 1,713 and 2,544 fewer students are renting a place to live. To measure the total economic impact of the pandemic on post-secondary spending in Niagara, we can multiply the suggested monthly expenditures of students presented in Table 3.2 by these figures. These potential scenarios are presented in Table 3.3.

Table 3.3 Estimated economic impact of COVID-19 on student spending in Niagara

	Lesser Spending Estimate		Higher Spending Estimate	
	Lesser demand decrease	Higher demand decrease	Lesser demand decrease	Higher demand decrease
Rent cost per month	\$425.00	\$425.00	\$531.00	\$531.00
Rent demand decrease	1,713	2,544	1,713	2,544
Rent payment decrease	\$728,025.00	\$1,081,200.00	\$909,603.00	\$1,350,864.00
Non-rent cost per month	\$706.40	\$706.40	\$782.80	\$782.80
Decrease in renters actively living in Niagara	2,941	4,369	2,941	4,369
Spending decrease	\$2,077,522.40	\$3,085,555.20	\$2,302,214.80	\$3,419,270.40
Total monthly impact:	\$2,805,547.40	\$4,166,755.20	\$3,211,817.80	\$4,770,134.40
Total yearly impact¹⁴	\$25,356,479.20	\$37,658,841.60	\$29,332,954.40	\$43,564,531.20

As presented in Table 3.3, if our more conservative estimates are accurate, then we can expect that the pandemic led to a monthly decrease in total student spending of \$2.8 million, for a yearly decrease of \$25.4 million (representing a decrease of 19.0%) relative to pre-pandemic spending. If, instead, our higher-impact scenario more accurately presents the pandemic's impact, then we will see a total monthly decrease in student spending in Niagara of \$4.8 million, for a yearly decrease in student spending of \$43.6 million (or 27.8% compared to pre-pandemic levels).

With the expectation that in both instances the exact number is not at one of the polar ends of the spectrum but rather somewhere in the middle, we estimate that the economic implications with regard to COVID-19 and student spending in Niagara is between \$25.4 million and \$43.6 million, or a decrease between 19.0% and 27.8% of pre-pandemic post-secondary student spending.

¹⁴ The yearly economic impact is relative to 12 months of rental costs and eight months of student spending. The calculation is done this way because post-secondary students typically sign a 12 month lease but only live in the unit for approximately eight months (two school terms).



Section 4 – Student Labour Force Engagement

The economic impact of students on Niagara's economy is not solely generated by their spending and rental habits. Post-secondary students further engage in Niagara's economy through employment within the general labour force as well as work-integrated learning (WIL) programs. This section breaks down the impact that the shift to virtual school has had on the number of students engaged in WIL placements as well as the broader labour force, and the resulting economic implications for Niagara.

Section 4.1 Student Employment

Specific data regarding student employment is difficult to ascertain; Statistics Canada considers full-time students to be not in the labour force when measuring youth engagement and does not differentiate between post-secondary students and youth more broadly. At the same time, because these activities take place off campus, it is difficult for post-secondary institutions to track this information. This subsection utilizes a number of estimates regarding student employment and employee output per industry to provide an approximation of the decrease in gross domestic product (GDP) output attributable to the decrease in students living in Niagara during the pandemic.

Section 4.1.1 Number of students working in Niagara

Statistics Canada presents annual data at a provincial level on the estimated percentage of post-secondary students who are working, by age cohort and type of institution attended (high-school, college, or university). Table 4.1 presents the percentage of post-secondary students within each cohort who are working as well as post-secondary enrollment in Ontario by cohort. It further applies these Ontario rates to Niagara's 2019 post-secondary enrollment figures to estimate the number of Niagara's students active in the local labour force.

Table 4.1 Employment of Niagara post-secondary students, based on Ontario trends, 2019

Age Cohort	Enrollment by age group, Ontario	Niagara post-secondary students	Percentage of employed students, Ontario	Employed students, Niagara post-secondary
15 to 19	29.8%	9,489	35.0%	3,321
20 to 24	54.9%	17,466	43.1%	7,534
25 to 29	15.2%	4,837	52.0%	2,514
Total	100%	31,792	42.0%	13,368

Source: Statistics Canada Tables 37-10-0106-01 and 37-10-0015-01

As can be seen, based on rates of employment for Ontario's post-secondary students, we expect approximately 13,368 Niagara post-secondary students to have been employed in 2019. This number would have been expected to be similar in 2020, notwithstanding the impact from the pandemic.



Calculations in Section 1 estimated that between 2,941 and 4,369 fewer students were living off-campus in Niagara during the pandemic compared to pre-pandemic levels. Moreover, survey data suggested a decrease of 2,090 students residing on-campus. Together, that would project a decrease of between 15.8% and 20.3% of the total student population eligible for working in Niagara in 2020.¹⁵ Applying this to the 2019 estimate of 13,368 students working in Niagara would suggest that between 2,112 and 2,714 fewer students will be engaging in Niagara's labour force due to the pandemic. However, it is important to note that these students do not all work full-time.¹⁶

A study involving over 8,500 students found that the average employed student worked 18 hours per week, equivalent to 0.45 hours of a full-time equivalent (FTE) employee (a full-time equivalent employee is classified as one working 2,080 hours annually, or 40 hours per week for 52 weeks).¹⁷ If we apply this rate of employment to the change in student employment then we can expect that the pandemic has led to a decrease of between 950.5 and 1221.2 FTE positions. These calculations are presented in Table 4.2.

Table 4.2 Estimated full-time equivalent decrease in student employment due to COVID-19

	Low-impact estimate	High-impact estimate
Decrease in students employed	2,112	2,714
Average hours worked per student	18 hours (.45 FTE)	18 hours (.45 FTE)
Decrease in FTE students employed	950.5	1221.2

Anecdotally, this estimated decrease is support through discussions with local businesses. Consultations with retail stores that traditionally rely upon post-secondary students to buttress their other staff identified that stores were struggling to fill job openings in fall 2020. In one specific instance a retail store within Fairview Mall noted that they had to stay closed more than once during fall 2020 because they could not fully staff their store. The store manager asserted that this was due to a lack of students, though with the acceptance that the general population was also less inclined to work in a public-facing role during the pandemic. At a minimum, among businesses we consulted with it was unanimous that the lack of post-secondary students was making the general administration of the store more difficult.

¹⁵ These decreases differ from those used in Sections 1 and 3, as those sections were only interested in students living off-campus. However, students living off-campus, on-campus, and at-home are all captured in the data in Table 4.1 regarding working in Niagara and are therefore included here.

¹⁶ Employers have suggested that students who are working in Niagara during the pandemic are both working more and working fewer hours during the pandemic. We do not have access to data that can confirm either of these assertions and will therefore instead maintain previous hourly work estimates.

¹⁷ Canadian University Survey Consortium. 2011. *2011 Undergraduate University Student Survey Master Report*. Page 26. https://www.cusc-ccreu.ca/publications/CUSC_2011_UG_MasterReport.pdf



Next, we use Statistics Canada youth employment data to estimate the percentage of youth working in each industry in Ontario. Taking these figures and multiplying by each industry's location quotient in Niagara allows for an estimation of the percentage of employed youth *in Niagara* who work in that industry. Finally, we can apply these percentages to the 13,368 students who worked in Niagara in 2019 to get an estimate of the students who would have worked in each industry in Niagara prior to the pandemic, as well as the FTE figures. These data can be seen in Table 4.3.

Table 4.3 Estimated post-secondary students employed by industry, Niagara, 2019

	Percentage of Niagara Total	2019 Jobs	2019 FTE Jobs
Accommodation and food services	27.2%	3,639	1,637
Retail trade	22.0%	2,941	1,323
Construction	7.9%	1,053	474
Health care and social assistance	7.7%	1,023	461
Finance and Insurance, Real Estate and Rental and Leasing, and Building, Business and Other Support Services	6.3%	838	377
Manufacturing	5.9%	784	353
Educational services	5.6%	745	335
Other services (except public administration)	4.2%	560	252
Information, culture and recreation	3.8%	511	230
Primary (agriculture, forest, fishing, mining, quarrying, oil and gas) and utilities	3.0%	395	178
Professional, scientific and technical services	2.3%	301	135
Wholesale trade	1.6%	220	99
Transportation and warehousing	1.4%	189	85
Public administration	1.3%	169	76
Total	100.0%	13,368	6,016

Source: NWPB Custom Calculation utilizing Statistics Canada Table: 14-10-0023-01 and Table: 14-10-0098-01.



Next, we are able to use the FTE jobs by industry data presented in Table 4.3 and assess the subsequent FTE jobs by industry *during the pandemic*, relative to the high and low impact scenarios presented in Table 4.2. For example, prior to the pandemic approximately 1,323 FTE (22.0% of the entire population of student employees) students worked within the retail trade sector. If the impact from COVID-19 is evenly distributed across industries retail trade would see 22.0% of the subsequent labour supply decrease. Complete industry data are presented in Table 4.4.

Table 4.4 Potential FTE job loss due to pandemic, post-secondary students, per industry, Niagara

	FTE Jobs Estimate, 2019	Low-impact (15.8% decrease in students) scenario		High-impact (20.3% decrease in students) scenario	
		FTE Jobs Lost	2020 Jobs	FTE Jobs Lost	2020 Jobs
Accommodation and food services	1,637	259	1,379	332	1,305
Retail trade	1,323	209	1,114	269	1,055
Construction	474	75	399	96	378
Health care and social assistance	461	73	388	93	367
Finance and Insurance, Real Estate and Rental and Leasing, and Building, Business and Other Support Services	377	60	317	77	300
Manufacturing	353	56	297	72	281
Educational services	335	53	282	68	267
Other services (except public administration)	252	40	212	51	201
Information, culture and recreation	230	36	194	47	183
Primary (agriculture, forest, fishing, mining, quarrying, oil and gas) and utilities	178	28	150	36	142
Professional, scientific and technical services	135	21	114	27	108
Wholesale trade	99	16	83	20	79
Transportation and warehousing	85	13	72	17	68
Public administration	76	12	64	15	60
Total	6,016	950	5,065	1,221	4,795

As with our other assessments, and considering that these are provincial approximations of youth employment that are subject to local fluctuations, we will utilize these figures as low- and high- end estimates of the impact of COVID-19 pandemic.



Section 4.1.2 Gross Domestic Product Impact

To quantify the impact from this decrease we estimated the net GDP output per employee in each industry. This short report presents the final GDP per employee totals; for a detailed breakdown of this calculation please see our full report.

We are able to apply the net GDP output per employee, per industry, to the number of students estimated to be lost from each industry due to the pandemic. Table 4.5 presents the implications of the low and high end estimates regarding post-secondary student labour supply decreases as well as the resulting impact to Niagara's GDP.

Table 4.5 Impact of COVID-19 on St. Catharines-Niagara CMA GDP output, post-secondary student labour supply decrease

	GDP output per FTE employee	Low-impact scenario		High-impact scenario	
		FTE labour supply decrease	Economic Impact	FTE labour supply decrease	Economic Impact
Accommodation and food services	\$26,559.59	259	\$6,871,815.62	332	\$8,828,891.35
Retail trade	\$23,124.14	209	\$4,834,904.40	269	\$6,211,872.96
Construction	\$16,901.65	75	\$1,265,497.09	96	\$1,625,907.47
Health care and social assistance	\$14,415.53	73	\$1,048,996.86	93	\$1,347,748.52
Finance and Insurance, Real Estate and Rental and Leasing, and Building, Business and Other Support Services	\$185,810.74	60	\$11,068,071.80	77	\$14,220,230.70
Manufacturing	\$50,125.25	56	\$2,795,116.34	72	\$3,591,158.42
Educational services	\$41,757.13	53	\$2,212,959.22	68	\$2,843,204.42
Other services (except public administration)	\$3,598.75	40	\$143,290.73	51	\$184,099.57
Information, culture and recreation	\$33,583.62	36	\$1,221,124.17	47	\$1,568,897.24
Primary (agriculture, forest, fishing, mining, quarrying, oil and gas) and utilities	\$93,558.23	28	\$2,627,690.28	36	\$3,376,049.83
Professional, scientific and technical services	\$2,322.57	21	\$49,674.29	27	\$63,821.40
Wholesale trade	\$81,502.97	16	\$1,276,166.44	20	\$1,639,615.42
Transportation and warehousing	\$12,316.36	13	\$165,265.52	17	\$212,332.72
Public administration	\$49,373.51	12	\$591,891.60	15	\$760,460.84
Total	\$41,076.71	950	\$39,034,116.36	1,221	\$50,150,934.14



One final adjustment is still required; to finalize the net GDP output we must calculate the savings that employers will accrue by not having to train new post-secondary employees. A 2019 report by Deloitte identified that, on average, Canadian businesses spent \$899 per employee on training.¹⁸ We will apply this figure to the total labour supply decrease presented in Table 4.4. Note that this calculation does not rely on a FTE figure, because each employee, regardless of the average number of hours worked per week, would need to undergo training. These calculations are presented in Table 4.6.

Table 4.6 Net decrease to GDP output due to COVID-19, after adjusting for training cost savings

	Low-impact scenario	High-impact scenario
2020 Economic Impact	\$39,034,116.36	\$50,150,934.14
Labour supply decrease	2,112	2,714
Total training cost savings	\$1,898,688.00	\$2,439,886.00
Net impact on GDP output	\$37,135,428.36	\$47,711,048.14

As can be seen, we are estimating that the adjusted annual impact to GDP output due to COVID-19 and the implications for post-secondary students is between \$37.1 million and \$47.7 million. This GDP output decrease represents a decrease of between 15.8% and 20.3% when compared to pre-pandemic post-secondary totals in Niagara. This total stems from a decrease in labour output resulting from a lack of post-secondary employees able to staff available positions.

¹⁸ Deloitte Canada, 2019. *University of Waterloo Economic Impact Assessment*. Page 28.



Section 4.2 Work-Integrated Learning

Similar to general employment, post-secondary students support Niagara businesses through a wide array of work-integrated learning (WIL) programs, including apprenticeships, clinical placements, co-ops, fieldwork, and course-based research. These work-integrated learning programs span a wide range of fields including medicine, law, business administration, culinary management, and hospitality. However, unsurprisingly, the number of students participating in WIL programs has declined during the pandemic. This subsection measures this decrease based on available data and then quantifies the corresponding economic impact to Niagara.

Section 4.2.1 Decrease in student WIL participation

Prior to the pandemic, in 2019, approximately 10,804 post-secondary students participated in work-integrated learning programs in Niagara.^{19 20} Using enrollment data alongside data from Co-operative Education and Work-Integrated Learning Canada (CEWIL), we are able to estimate the decrease in the supply of post-secondary WIL students actively engaged within the Niagara economy.

To begin, available data suggests that WIL programs at Niagara College and Brock University have seen a 12.2% decrease since the beginning of the pandemic. Students who are actively enrolled in a WIL program during the pandemic are also having greater difficulties finding placements. Specifically, data trends from post-secondary institutions that are members of CEWIL suggest successful placements have decreased by 19.7% for Niagara's WIL students. Table 4.7 applies these data to the estimated 10,804 students enrolled in WIL programs prior to the pandemic.

Table 4.7 Estimated decrease in Niagara post-secondary WIL placements due to COVID-19

	2019	2020	Change, 2019 to 2020
Enrollment, WIL programs	10,804	9,485	-1,319
Successful Placement %	86.4%	66.7%	-19.7%
Successful Placements	9,331	6,325	-3,006

As can be seen, these estimates suggest that there are 1,319 fewer students enrolled in WIL programs in Niagara in 2020. Moreover, these data further suggest that work-integrated learning students at Niagara's post-secondary institutions saw 3,006 fewer placements in 2020-21 due to the pandemic, when compared to pre-pandemic levels of engagement.

¹⁹ Niagara College, 2020. *At a Glance*. <https://www.niagaracollege.ca/wp-content/uploads/At-a-Glance-1312020.pdf>

²⁰ Brock University, 2019-2020. *Brock Facts*. https://brocku.ca/institutional-analysis/wp-content/uploads/sites/90/Brock-Facts-2019-2020_WithOSAP_2020.09.18.pdf and <https://brocku.ca/ccee/co-op-education/>



Section 4.2.2 Economic impact of student WIL participation decreases

Similar to the employment data in Section 4.1, we can attempt to quantify the impact that this work-integrated learning shortage will have on Niagara's gross domestic product. Utilizing a 2019 report by Deloitte on the University of Waterloo's economic impact, we are able to estimate that each WIL student in Niagara generates approximately \$12,965.78 in net GDP output.²¹ As with the section on general employment, for a detailed breakdown of this calculation please see our full report.

To quantify the suggested total economic impact of the decrease in work-integrated learning students, we must now take this output estimate of \$12,965.78 and apply it to the decrease in students who successfully found a placement in 2020 (3,006 students). Table 4.8 combines these data to present a total expected decrease in GDP output.

Table 4.8 Estimated decrease in GDP output due to decrease in placed WIL students, 2020-21

	2020-21 Estimates
GDP output per WIL student, St. Catharines-Niagara CMA	\$12,965.78
Decrease in WIL students due to COVID-19	3,006
Total expected decrease in GDP output	\$38,975,134.68

As can be seen, the total estimated impact of the pandemic with regard to output generated by WIL students in Niagara is \$38,975,134.68. Compared to pre-pandemic estimates, this figure suggests that COVID-19 has led to a decrease in GDP output of 32.2% from work-integrated learning programs during the 2020-21 post-secondary school year.

²¹ Deloitte Canada, 2019. *University of Waterloo Economic Impact Assessment*. Page 28.



Section 5 – Considerations outside the scope of this report

We have endeavoured here to provide a thorough assessment of the economic ramifications of post-secondary education temporarily moving online, specifically related to the subsequent lack of students moving to, and spending money within, the Niagara region. There are nevertheless additional economic measures that are too cumbersome to be assessed here. These measures include staff layoffs, projected capital expenditures over the medium-term as well as the loss of future localized earnings from students who would have remained in Niagara post-graduation.

We are acutely aware that the impact from receding revenue sources during this pandemic has led to the reduction in many part- and full- time staff at Brock University and Niagara College. Though this will have a significant impact on Niagara's economy, this report is focused solely on the impact that is arising from a lack of student spending and direct labour force engagement. As such, the staffing changes of non-students, even as they relate to fewer students moving to Niagara, are not included here.

We are further aware that capital expenditures are a net-positive to the local community. Nevertheless, it is not accounted for in this paper due to the inability to ascertain the pandemic's direct impact. It is likely that the effects on capital expenditures will have a multi-year lag effect, meaning that the impact will not be known until after the pandemic subsides. Though we are able to assess revenue impacts and enrollment decreases, it would be disingenuous to attempt to apply a direct correlation between current revenue decreases and future capital investments.

Finally, one of the major economic benefits to having local post-secondary institutions is the ability to "showcase" local career opportunities; when students do not live in the region while pursuing their degree this effect is inherently dampened. The 2018 EMSI Economic Impact report calculated that former students generated \$679.3 million in added income to the region. This total includes "higher wages that students earned during the year, the increased output of the businesses that employed the students, and the multiplier effects that occurred as students and their employers spent money at other businesses". It is likely that losing (at a minimum) one year of studying in Niagara will result in a tangible decrease in the number of students remaining in the region after graduation. However, similar to capital expenditures, this effect will remain unclear for a significant period of time and is therefore not assessed here.

Undoubtedly there are other economic impacts from COVID-19 and the shift to virtual post-secondary learning that are not mentioned here. However, the direct economic impact of these factors is either outside the scope of this project or unknowable in the short term, and are therefore not part of this project's calculations.



Concluding assessments

The COVID-19 pandemic forced post-secondary institutions to shift a large portion of their programs to a virtual model, which greatly impacted the Niagara region's economy given the presence of both Niagara College and Brock University. Though certain aspects of the post-secondary experience remained in-person, the decline in enrollment coupled with some students choosing to remain at-home while studying virtually led to a significant decrease in post-secondary students living in Niagara. This report has assessed the economic impact of this shift to virtual learning through the lens of the Niagara rental market, public transit ridership, declines in localized student spending, and a decrease in available labour supply.

This paper found that the pandemic resulted in:

- A decrease of between 1,713 and 2,544 students (decreases of 13.8% and 20.5%, respectively) renting a housing unit in Niagara and 2,941 and 4,369 fewer students (23.7% and 35.2%) living in Niagara;
- A decline in student U-Pass payments of between \$2.9 million and \$3.3 million, representing a decrease in 79.6% of expected U-Pass payments;
- A decrease in local student spending between \$2.8 and \$4.8 million monthly, adjusted to between \$25.4 and \$43.6 million over the course of one year, totaling approximately 19.0% and 27.8% of pre-pandemic spending;
- A decrease in Niagara's GDP output of between \$37.1 million and \$47.7 million (15.8% and 20.3% of pre-pandemic student-driven GDP output) due to a lack of student labour supply in the region, and
- A decrease in Niagara's GDP output of \$39.0 million due to a lack of student work-integrated learning placements within the region, a reduction in WIL student output of 32.2%.

In total, the facets of economic activity assessed within this report suggest that the impact from the pandemic related to direct student engagement in Niagara's economy over the course of the 2020-2021 school year is between \$104.4 million and \$133.6 million. This range represents a relative reduction in post-secondary student economic output of between 21.2% and 25.8% compared to pre-pandemic estimates.

Subject: 2020 Reserve Water and Wastewater Treatment Capacities

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 14, 2021

Recommendations

1. That Report PDS 20-2021 **BE RECEIVED** for information; and
2. That Report PDS 20-2021 **BE CIRCULATED** to the Ministry of the Environment, Conservation and Parks and Local Area Municipalities.

Key Facts

- The purpose of this report is to inform Council of the reserve treatment capacities at Niagara's Water and Wastewater Treatment facilities. This reporting is required by the Ministry of Environment, Conservation and Parks (MECP).
- The data contained in this report assists in commenting on new development proposals and related servicing as well as planning for future treatment capacity.
- All of Niagara Water Treatment Plants (WTPs) and Wastewater Treatment Plants (WWTPs) are positioned to accept growth beyond the minimum 10 year horizon.

Financial Considerations

This report provides Council with historical and projected treatment capacity and flow data. There are no direct financial implications in receiving this report.

The reserve treatment capacities at the water and wastewater (W&WW) facilities are considered in commenting on new development proposals and related servicing and, as a result, could result in a financial impact related to specific future applications.

Analysis

The Infrastructure Planning and Development Engineering section of Planning and Development Services Department annually reports on an assessment of the average daily W&WW flows based on the previous five years, as recorded at our various facilities compared to MECP rated capacities for the facilities. Included in the analysis are the 10-year growth projections in accordance with Niagara 2041 (*How we Grow, Flow and Go*).

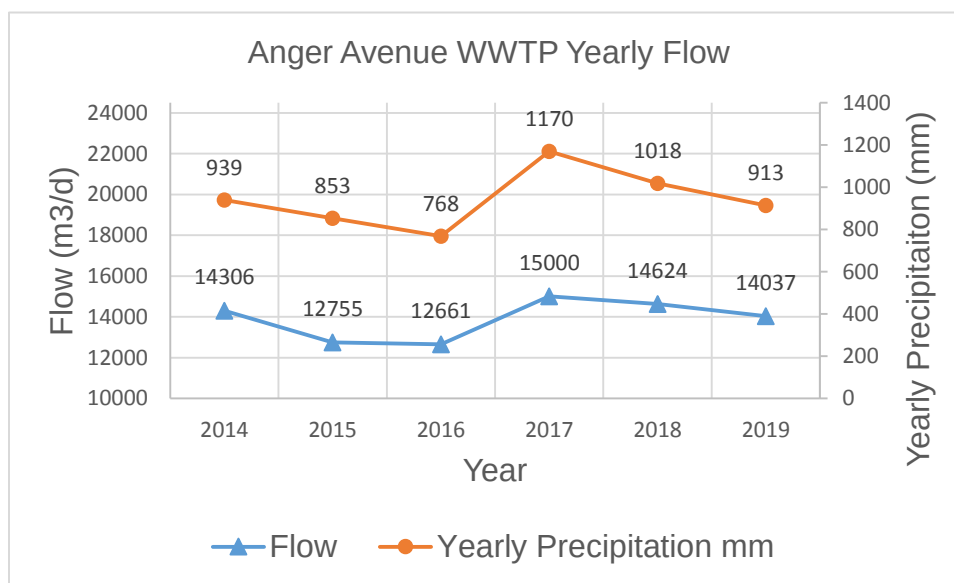
A key objective of this report is to highlight potential capacity constraints and allow sufficient lead time to plan for future capacity increases through the W&WW capital programs so that development may continue unencumbered. This is a ‘desktop’ exercise, which compares five-year (annual) average flows to the respective MECP Environmental Compliance Approval(s), formerly known as Certificate of Approval(s) for each facility, then incorporates 10-year growth forecasts into the calculation. Ongoing phasing and staging strategy works with our local municipal partners will further refine this assessment for understanding development capacity.

This assessment does not reflect specific compliance, quality, sustainability, risk, or operational deficiencies at the treatment plants or trunk conveyance/transmission systems, which may affect the Region’s ability to approve new development or permit servicing extensions.

For municipal wastewater treatment, weather is the key factor that results in peak wet weather flows, which impacts the collection and trunk sewers in both local and regional systems through “Rainfall Derived Inflow and Infiltration” (RDI&I). Even though, it is expected to record higher flows due to population growth, the annual average daily flows to the WWTPs are higher due to the wet weather flows entering the systems.

Just for an example, Figure 1 illustrates a direct correlation of wastewater plant flows and yearly precipitation at Anger Avenue WWTP.

Figure 1: Correlation of Wastewater Flows with Precipitation



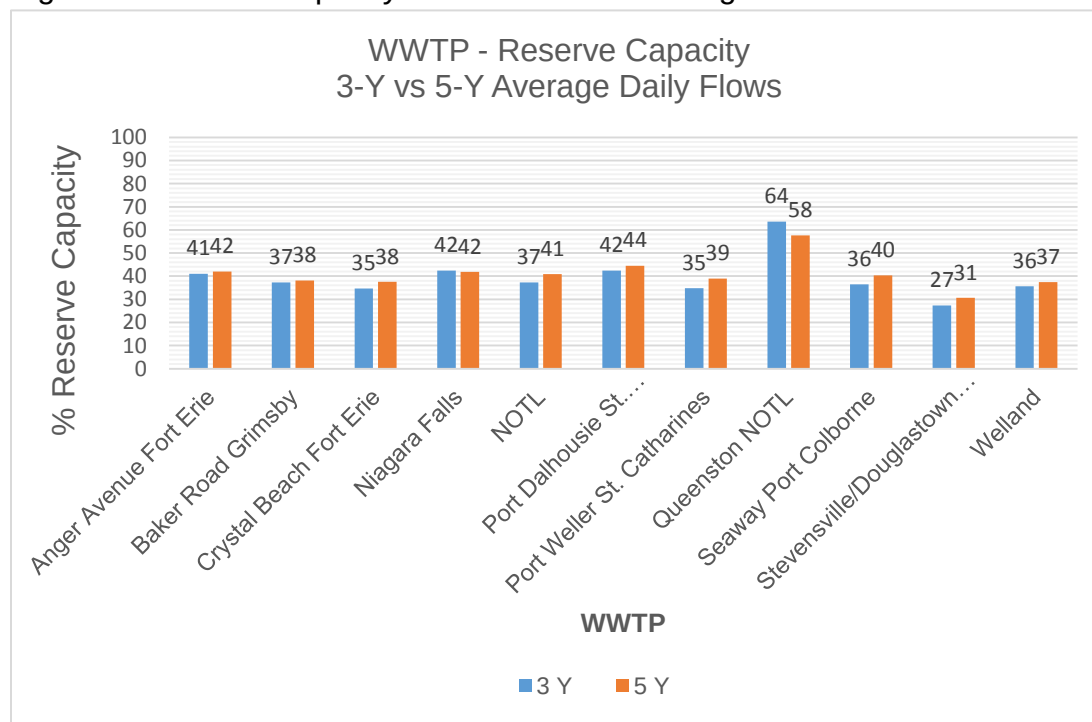
Wet weather flows can have substantial impact on available WWTP capacities and a direct impact on the limitations of available servicing capacity for future growth.

Appendix 1 and 2 provide the annual average daily flows from 2016 to 2020 as well as the three-year and five-year averages for the water and wastewater treatment plants, respectively. Appendices 3 and 4 provide a summary of Niagara's six water treatment facilities and eleven wastewater treatment facilities presenting their respective reserve capacities.

It is worth noting that the greater growth rates in recent years in Niagara show a more consistent increase in flows over the last few years, which consequently can impact the way this 'desktop' exercise conducts the reserve capacity calculations. If the annual daily flows are averaged over longer period of time, it can potentially create a skewed sense of greater reserve capacity. Therefore, an analysis of the three-year and five-year annual average daily flows for reserve capacity was completed to better understand this potential impact.

As shown on Figure 2 below, in general, the three-year average of Reserve Capacity for WWTP were slightly less than the five-year (except for Queenston NOTL WWTP); however, this was not a significant difference.

Figure 2: Reserve Capacity – Annual Flows Averaged over 3-Year and 5-Year Period



Going forward, the annual average daily flows over the last 3-years and 5-years will be compared and analyzed to understand if a more significant difference in Reserve Capacity develops.

At present, all of Niagara's WTPs and WWTPs are positioned to accept growth beyond the minimum 10-year period (Appendix 3 and Appendix 4).

Wet Weather Management

In order to accommodate the anticipated growth from Niagara 2041, the 2016 W&WW Master Servicing Plan (MSP) investigated capacity upgrades (upgrades to trunk sewers, pumping station capacities, etc.), upstream management (storage, peak shaving, diversion), and peak flow management (flow reduction, Inflow & infiltration (I&I) reduction projects) for every wastewater system. Based on this review, there are wet weather projects listed with identified areas for targeted I&I removal to offset the requirement to upgrade and expand more expensive infrastructure all the way to the WWTPs. It is crucial to achieve the I&I reductions in order to offset the capacity needs from growth, to protect the environment, and mitigate potential basement flooding.

The Region and Area Municipalities are continuing to work collaboratively to facilitate ongoing development throughout the region and provide the requisite servicing and capacity allocation in a responsible way to service the communities.

In addition, the Region has been aiding Area Municipalities by funding the CSO Control program as a part of the overall Wet Weather Management Strategy to support various I&I related projects and programs on the municipal side. This program has been reducing the impacts of I&I and has been a benefit to both, the Region and the Area Municipalities.

Staff is working with the Development Industry including Public Works Officials, Building Officials, Developers, Consultants and Contractors to raise awareness on the wet weather management issues and potential upcoming changes to address this. The Region is also represented at the Expert Stakeholder Committee (ESC) for the *Guideline to Undertaking Flow Monitoring of New Construction* and will work with all stakeholder to review the flow monitoring of new subdivisions as mandatory.

Alternatives Reviewed

No alternatives were reviewed for this report.

Relationship to Council Strategic Priorities

The report aligns with Council's Priority of Responsible Growth and Infrastructure Planning by highlighting the reserve capacity available to growth at all Regional Water and Wastewater Treatment Facilities.

The report also provides MECP and local municipal partners operational summary and reserve capacity projections for Region's Water and Wastewater Treatment facilities

Other Pertinent Reports

- PDS 13-2020, April 8, 2020, 2019 Reserve Water and Wastewater Treatment Capacities
- PW 22-2017, May 30, 2017, 2016 Water and Wastewater Master Servicing Plan Update

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This report was prepared in consultation with Phill Lambert, Director Planning and Development Services, John Brunet, AD Water Operations and Staff Development and Jason Oatley, Manager WW Quality & Compliance.

Appendices

- | | |
|------------|---|
| Appendix 1 | Annual Average Daily Flow 2016 to 2020 WTP |
| Appendix 2 | Annual Average Daily Flow 2016 to 2020 WWTP |

Appendix 3	Water Reserve Capacity Calculations for 2020
Appendix 4	Wastewater Reserve Capacity Calculations for 2020

Appendix 1: WTP Annual Average Daily Flow 2016 - 2020

Water Treatment Plant	Rated Capacity (m ³ /d)	Average Daily Flow (m ³ /d)							3 to 5 Year % Change
		2016	2017	2018	2019	2020	5 Year 2016 - 2020	3 Year 2018 - 2020	
Decew Falls WTP	227,300	54,903	54,321	56,090	53,303	53,390	54,401	54,261	0%
Grimsby WTP	44,000	15,699	14,020	14,866	14,029	15,726	14,868	14,874	0%
Niagara Falls WTP	145,584	47,350	45,192	44,780	43,400	40,145	44,173	42,775	-3%
Port Colborne WTP	36,000	7,719	8,735	8,864	7,282	6,870	7,894	7,672	-3%
Rosehill WTP	50,026	13,148	12,388	12,862	11,188	11,024	12,122	11,691	-4%
Welland WTP	65,000	21,858	21,590	22,538	22,579	24,670	22,647	23,262	3%

Appendix 2: WWTP Annual Average Daily Flow 2016 - 2020

Wastewater Treatment Plant	Rated Capacity (m ³ /d)	Average Daily Flow (m ³ /d)							3 to 5 Year % Change
		2016	2017	2018	2019	2020	5 Year 2016 - 2020	3 Year 2018 - 2020	
Anger Avenue WWTP	24,500	12,661	15,000	14,624	15,146	13,580	14,202	14,450	2%
Baker Road WWTP	31,280	16,999	20,897	19,975	20,910	17,952	19,347	19,612	1%
Crystal Beach WWTP	9,100	4,676	5,915	5,874	6,276	5,688	5,686	5,946	4%
Niagara Falls WWTP	68,300	35,880	44,684	41,489	41,360	35,242	39,731	39,364	-1%
NOTL WWTP ⁽¹⁾	8,000	4,021	4,561	4,687	5,237	5,142	4,730	5,022	6%
Port Dalhousie WWTP	61,350	29,616	34,823	35,095	36,681	34,113	34,065	35,296	3%
Port Weller WWTP	56,180	29,650	32,090	36,881	39,211	33,751	34,317	36,614	6%
Queenston WWTP	500	278	234	198	213	135	212	182	-16%
Seaway WWTP	19,600	9,103	12,082	12,580	13,472	11,299	11,707	12,450	6%
Stevensville/Douglastown Lagoon	2,289	1,314	1,635	1,670	1,729	1,592	1,588	1,664	5%
Welland WWTP	54,550	29,728	35,407	34,643	37,137	33,617	34,107	35,133	3%

Note 1: Effluent discharge from NOTL WWTP started directly on January 6, 2020 after previously used lagoon was gradually decommissioned by January 16, 2020.

Appendix 3: WTP Reserve Capacities for 2020

Water Treatment Plant	Permit To Take Water ⁽¹⁾	Rated Treatment Capacity	Theoretical Average Day Capacity	90% of Average Day Capacity ⁽³⁾	5-Year Average Day Flow	Peaking Factor ⁽²⁾	Total Capacity Used	Reserve Treatment Capacity (90% base) MLD	Design Flow Rate (275 Lcd)	Reserve Serviceable Population Equivalents	10-Year Forecast For Population (Res & Emp)	Surplus Population 10-Year Projection
	MLD											
DeCew Falls WTP	227.0	227.3	143.4	129.1	54.4	1.585	38%	74.7	275	271,636	30,398	241,238
Grimsby WTP	44.0	44.0	26.5	23.9	14.9	1.658	56%	9.0	275	32,727	14,771	17,956
Niagara Falls WTP	145.5	145.6	88.2	79.4	44.2	1.650	50%	35.2	275	128,000	23,782	104,218
Port Colborne WTP	45.5	36.0	22.4	20.2	7.9	1.608	35%	12.3	275	44,727	1,552	43,175
Rosehill WTP	78.0	50.0	31.8	28.6	12.1	1.573	38%	16.5	275	60,000	6,375	53,625
Welland WTP	110.0	65.0	43.4	39.1	22.6	1.499	52%	16.4	275	59,636	12,292	47,344

Note 1: Original MOE approved quantity of raw water permitted (Permit To Take Water).

Note 2: The peaking factors used are based on an average of actual flow rates of maximum day versus average day flows over the past three years at each facility.

Note 3: Region's W&WW MSP (GM BluePlan, 2017) requires planning process for expansion when plant capacity exceeds 80%, and expansion should be completed when capacity exceeds 90%.

Appendix 4: WWTP Reserve Capacity for 2020

Wastewater Treatment Plant	MOE Plant Rated Capacity	90 % of Plant Capacity ⁽¹⁾	5-Year Average Daily Flow	Total Capacity Used	Reserve Treatment Capacity (90% base) (m³/d)	Design Flow Rate ⁽²⁾ (365 Lcd)	Reserve Serviceable Population Equivalents	10-Year Forecast For Population (Res & Emp)	Surplus Population 10-Year Projection
	(m³/d)								
Anger Avenue (Fort Erie) WWTP	24,500	22,050	14,202	58%	7,848	365	21,500	4,277	17,223
Baker Road (Grimsby) WWTP	31,280	28,152	19,347	62%	8,805	365	24,125	16,791	7,334
Crystal Beach (Fort Erie) WWTP	9,100	8,190	5,686	62%	2,504	365	6,861	1,443	5,418
Niagara Falls WWTP ⁽³⁾	68,300	61,470	39,731	58%	21,739	365	59,559	19,980	39,579
NOTL WWTP ⁽⁴⁾	8,000	7,200	4,730	59%	2,470	365	6,767	2,644	4,123
Port Dalhousie (St. Catharines) WWTP	61,350	55,215	34,065	56%	21,150	365	57,944	15,005	42,939
Port Weller (St. Catharines) WWTP	56,180	50,562	34,317	61%	16,245	365	44,508	10,052	34,456
Queenston (NOTL) WWTP ⁽⁵⁾	500	450	212	42%	238	365	653	99	554
Seaway (Port Colborne) WWTP	19,600	17,640	11,707	60%	5,933	365	16,254	1,622	14,632
Stevensville/Douglastown Lagoon	2,289	2,060	1,588	69%	472	365	1,293	795	498
Welland WWTP	54,550	49,095	34,107	63%	14,988	365	41,064	12,912	28,152

Note 1: Region's W&WW MSP (GM BluePlan, 2017) requires planning process for expansion when plant capacity exceeds 80%, and expansion should be completed when capacity exceeds 90%.

Note 2: Design Flow Rate incorporated 90 L/c/d of extraneous flow allowance

Note 3: The Niagara Falls WWTP assessment includes the sewage flows from the St. David's area of Niagara-on-the-Lake.

Note 4: Effluent discharge from NOTL WWTP started directly in January 2020 with previously used lagoon, decommissioned.

Note 5: The Queenston WWTP in Niagara-on-the-Lake has a unique capacity commitment of 226 m³/d for the following properties: Niagara Parks Commission (75 m³/d), Niagara Falls Bridge Commission (63 m³/d), Shalamar Campground (38 m³/d) and Ontario Power Generation (50 m³/d). Due to these commitments and limited UAB, limited residential growth is expected within the next 10 year period within the tributary area.

Subject: Airport Master Plan Update

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 14, 2021

Recommendations

1. That Report PDS 21-2021 **BE RECEIVED** for information; and
2. That Report PDS 21-2021 **BE CIRCULATED** to the Niagara Central Dorothy Rungeling Airport Commission and Niagara District Airport Commission.

Key Facts

- This report provides an update on the status of the airport master plans and airport economic impact assessments being prepared for Niagara District Airport and Niagara Central Airport.
- The primary objective of an Airport Master Plan is to establish a rational development concept for an airport that protects and preserves the long term operational and business objectives, while accommodating short-term improvements.
- Through a competitive process, WSP was selected to undertake a master plan and economic impact assessment for Niagara District Airport and Niagara Central Airport.
- The master plans are being undertaken in consultation with both airport commissions as well as local municipal planning staff.
- The expected completion of this project is June 2021.

Financial Considerations

The Airport Master Plan is being undertaken in accordance with a business case approved as part of the 2020 operating budget. Through this business case, staff were directed to undertake an Airport Master Plan process for Niagara District Airport (CYSN) and Niagara Central Dorothy Rungeling Airport (NCDRA).

In addition, a full-time a temporary position to project manage the airport portfolio was approved. Due to uncertainties with the COVID-19 pandemic, the project manager role was not filled.

Analysis

The Airport Master Plan project and associated Economic Impact Assessment build on previous work supporting the transfer of ownership for both NCDRA and CYSN facilities. A summarized background of work done to support the consideration of the airport transfer is outlined below:

- In 2016, Niagara Regional Council approved in principle the adoption of sole responsibility of CYSN and NCDRA subject to the completion of a Phase 2 Environmental Site Assessment (ESA) on each airport.
- In 2018, the results of the Phase 2 ESA indicated there were no soil or groundwater impacts identified requiring further action or remediation.
- In May 2019, Regional Council was further updated on the project, and made a motion to move forward with a Terms of Transfer of ownership to the Region and a full cost assessment that could be considered by Council.
- In September 2019, staff brought forward a Terms of Transfer for both facilities which suggested airport operations be considered as part of the 2020 budget process.
- Ultimately Council chose to defer the Terms of Transfer and pursue additional due-diligence related to master plans and governance structure.

Regardless of the future role the Region plays with respect to airport ownership, the CYSN and NCDRA airport Master Plans are important to the future operations of both facilities.

The Master Plans will serve as a development framework and an investment tool to assist airport management in making informed and strategic decisions about the timing and estimated costs of future improvements, action plans, and preferred development options.

Airport Master Plans typically accommodate the needs of an airport over an identified planning horizon, with updates undertaken every 5 to 10 years to ensure the relevancy

of the plan. The planning horizon established for this project is 20 years, meaning the Master Plan timeframe is from 2021 to 2041.

The Airport Master Plan project has been divided into 6 phases. These phases, and their status, is outlined below:

1. Data Collection (Completed Q3 2020)
2. Development of Business Scenarios (Ongoing & Concurrent with Phases 3-4)
3. Identification of Functional Requirements (Ongoing & Concurrent with Phase 4)
4. Development of Options (Current Stage)
5. Business Plan (Estimated completion May 2021)
6. Final Documentation (Project completion June 2021)

To date, several important background documents that will inform the Master Plan have been completed, including a wind rose (wind study) & meteorological data for each airport, and activity forecasts for each airport. The consulting team is now working through a series of preliminary development options for each facility.

A survey and questionnaire was developed for the airport Commissions seeking feedback on the vision for each facility. In addition, WSP's team working on the economic impact component of the plan has reached out to several airport based businesses for feedback.

Both the Niagara District Airport Commission and staff, and the Niagara Central Dorothy Rungeling Airport Commission have been engaged in the airport Master Planning process. Regional staff and the consulting team have attended airport Commission meetings and participated in site visits with airport staff and Commission members.

Regional Planning Staff have also had discussions with Local Planning Staff in the Town of Pelham and Town of Niagara-on-the-Lake with respect to land use considerations for their respective airport facility.

The final Airport Master Plans and Economic Impact Analysis work is expected in June 2021.

Alternatives Reviewed

As this report is for information, there are no alternatives.

Relationship to Council Strategic Priorities

Not applicable at this time.

Other Pertinent Reports

- CAO 4-2019 Airport Project Update
- CSD 62-2019 Airport Project Update Terms of Transfer Negotiations

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Submitted by:

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Acting Chief Administrative Officer

MEMORANDUM

PDS-C 29-2021

Subject: Niagara 2051 Project – Water & Wastewater Master Servicing Plan Update – Public Information Center Number 1

Date: April 14, 2021

To: Planning & Economic Development Committee

From: Phill Lambert, P. Eng, Director, Infrastructure Planning & Development Engineering

The purpose of this memo is to provide Committee & Council with an overview of the Niagara 2051 project and introduce the Notice of Commencement/Public Information Centre #1 for the Region's 2021 Water & Wastewater Master Servicing Plan Update to be available virtually on April 21, 2021. A link to the project page will be sent to Council once the project page and contents are available.

The Provincial Growth Plan forecasts an additional 214,000 people and 81,000 jobs from 2016 to 2051. With Niagara growing to 674,000 people by 2051, the alignment of growth, infrastructure and finance is crucial for proactively managing growth.

Niagara 2051 represents a coordinated approach of a number corporate projects including:

- Development Charges (DC) Background Study and By-Law
- Water & Wastewater (W&WW) Master Servicing Plan (MSP) Update
- Transportation Master Plan (TMP) Refresh
- Region Official Plan – 2051 Population & Employment Forecasts

Establishing Niagara 2051 as the overarching umbrella for the coordination of these projects is very important to ensure greater consistencies of the various project components and allows for greater public engagement. All of these studies are linked with the anticipated growth out to 2051 and required capital projects to support Niagara achieving its potential, which is then incorporated into the Development Charges Background Study. A cross-departmental team made up of the project leads meet on a regular basis to ensure integration of these projects, which includes staff from Corporate

Services, Planning & Development Services, Transportation, Water and Wastewater, Asset Management, and Communications. Staff is committed to providing Committee and Council with updates on the overall project subcomponents as milestones are reached. The following provides a brief update on these individual projects.

Development Charge Background Study & By-law

- Project consulting was awarded to Watson and Associates Economists Ltd. (Watson) in late 2020.
- Watson was lead consultant on 2017 DC background study and by-law and has significant experience in completing projects of a similar size and scope with other municipalities.
- Utilize TMP Refresher, W&WW MSP, and Growth inputs to produce DC Background Study
- Ensures that Growth pays for Growth
- First Regional Development Charge Policy Task Force (RDCPTF) meeting occurred March 25, 2021.
- Current Development Charges By-Law expires August 31, 2022

W&WW Master Servicing Plan Update

- Project consulting was awarded to GM BluePlan Engineering (GMBP) – engineering agreement signed on January 14, 2021.
- GMBP has previously lead the Regional 2016 W&WW MSP, numerous Area Municipality studies and has significant knowledge of both Regional and Municipal water distribution and wastewater collection systems including individual facilities.
- An initial kick-off meeting between GMBP and Regional staff was held on January 26, 2021.
- Key deliverable to provide W&WW capital infrastructure projects to support growth out to 2051.
- Tight timeframe to provide capital project list for DC Background Study by end of 2021.
- Multiple meetings and touch points planned with Local Municipal Partners throughout project.
- Notice of Commencement/Public Information Centre #1 to be virtually available on April 21, 2021 on project website.

Transportation Master Plan Refresh

- Request for proposal for consulting services to update Niagara Region's EMME Travel Demand Model (Activity Based) and to provide professional and technical services related to the preparation of a Transportation and Transit Background component for the 2022 Development Charges Study was issued in Q1 2021.
- The kick-off meeting for this consulting assignment is expected Q2 2021.
- Transportation will coordinate information with Watson and GMBP, and internal stakeholders including Planning and Development, Water & Wastewater Services and Communications.
- Projects identified in the approved Transportation Master Plan will undergo a DC refresh based on revised capital costs to construct. New strategic projects will also be identified and included.

Region Official Plan

As previously noted, the Region must plan to the forecasted growth set out in the Growth Plan: a minimum increase of 214,000 people and 81,000 jobs from 2016 to 2051.

All decisions of Council must conform to the Growth Plan. Thus, the coordination of growth planning through the Official Plan, the Development Charges, W&WW MSP and TMP is critical.

Planning staff are working to provide Council with a consolidated draft of the Niagara Official Plan (NOP) for adoption for the end of 2021. An important part of this process is the presentation of a Joint Consolidated report to Planning and Economic Development Committee in May 2021. That Report will provide an update on all policy sections of the NOP, and draft policies on many key sections for the NOP, including those relating to forecasted growth.

The Joint Consolidated report will provide draft growth allocations, intensification rates and greenfield density targets for the local municipalities. This growth management information will be identified in policy for discussion and comment through the summer.

A key component of growth management is the land needs assessment, which identifies the amount of land for each local municipality, amongst other things. The land needs assessment has been carefully integrated with the assessment of options for a Natural Environment System (NES) as the NES will identify in part where growth

cannot occur. The draft land needs assessment identifies which municipalities need more land for community (residential) or employment purposes.

The above growth management components will be discussed at local Council workshops and a Regional Council workshop prior to PEDC considering the Joint Consolidated report in May 2021.

Respectfully submitted and signed by

Phill Lambert, P. Eng.
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