

# Risk Implications for the Niagara-on-the-Lake Accommodation/Food Businesses:

Fair Workplaces, Better Jobs Act, 2017

Transient Accommodation Tax

January 2018



CANADIAN CENTRE FOR  
ECONOMIC ANALYSIS

## About the Canadian Centre for Economic Analysis

The Canadian Centre for Economic Analysis (CANCEA) is a socio-economic research and data firm. CANCEA provides objective, independent and strictly evidence-based analysis dedicated to a comprehensive, collaborative, and quantitative understanding of the short- and long-term risks and returns behind market changes, policy decisions and economic outcomes. CANCEA also provides comprehensive Canadian data services.

CANCEA uses modern techniques in data science, agent-based modelling, econometric analysis, risk management, demographics and epidemiology.

CANCEA's work primarily focuses upon: market analysis; policy evaluation and risk management; business model optimization; cost effectiveness and rate of return analysis; macroeconomic analysis; insurance risks; land use and infrastructure planning; logistics; labour market analysis.

At the centre of CANCEA's analytical capabilities is an agent-based platform called Prosperity at Risk® that is a rich data driven model of 56,000 locations across Canada. Given the systems focus behind all of CANCEA's work, CANCEA has a one model approach to its analysis which allows various disciplines and stakeholders to be incorporated into analysis.

©2018 Canadian Centre for Economic Analysis

ISBN: 978-1-989077-01-6

Printed in Canada • All rights reserved

## About the Report

CANCEA does not accept any research funding or client engagements that require a pre-determined result or policy stance, or otherwise inhibits its independence.

In keeping with CANCEA's guidelines for funded research, the design and method of research, as well as the content of this study, were determined solely by CANCEA.

This information is not intended as specific investment, accounting, legal or tax advice.

**Citation:** CANCEA. Risk Implications for Niagara-on-the-Lake Accommodation and Food Businesses: Fair Workplaces, Better Jobs Act and the Transient Accommodation Tax. January, 2018.

## TABLE OF CONTENTS

Summary results and conclusion .....	3
1.0 Introduction .....	4
2.0 Uncertainties for the economic development of Niagara-on-the-Lake.....	5
2.1 The Act: Impacts for Ontario .....	5
2.2 The Act: Impacts for Niagara region .....	6
2.3 The Act: Impacts for the Niagara-on-the-Lake overnight accomodation sector .....	8
3.0 Transient Accomodation Tax and the Act.....	9
3.1 Demand sensitivity of tourism and hospitality to price changes .....	9
3.2 Competition.....	10
3.3 The Act and Accomodation Tax impacts for Niagara-on-the-Lake overnight accomodation sector .....	11
Appendix A. Bibliography.....	12
Appendix B. Detailed results.....	13
Appendix C. Assumptions and settings.....	14
C.1. Model key data settings .....	14
C.2. Hotel gross operating surplus: Basic calculations.....	15
C.3. Overnight visitor industries affected: Basic calculations .....	15
C.4. Change from base case: Basic calculations.....	16

## SUMMARY RESULTS AND CONCLUSION

The recently passed Bill 148: Fair Workplaces, Better Jobs Act, 2017 (the Act) represents a package of sudden and significant changes for Ontario businesses to digest over the next few years.

Sectors such as accommodation and food are expected to be more affected by the labour changes given their lower gross operating margins and high proportion of minimum wage paying labour costs.

To the extent of changes in demand by overnight visitors, the Act is expected to cost the accommodation and food sector in Niagara-on-the-Lake \$2.5 million in lost gross operating surplus. Price changes induced by the Act alone are expected to account for 3,100 fewer overnight visitors to the region in a year.

Along with the business risks associated the Act, the introduction of a Transient Accommodation Tax ("Accommodation Tax") in 2018 would compound these risks for the region as:

- About 72% of the person visits to the region are for pleasure, a form of tourism that is most sensitive to price changes; and
- Combined with the additional costs associated with the Act, an Accommodation Tax of 3% compounds the:
  - Reduction of overnight visitor demand from 3,100 to 8,400 per annum, of which many non-accommodation businesses depend on; and
  - Costs of the Act by 1.35 times, with the total cost to business amounting to \$3.4 million in 2018. This represents an effective 5.7% reduction in business revenues.

While an Accommodation Tax of 3% on such activity would raise about \$780,000 from overnight visitors, it would cost local businesses \$1.5 million in lost revenue and local households \$530,000 in lost wages (after accounting for half of the Accommodation Tax paid as wages in the region).

The introduction of an Accommodation Tax in addition to the current changes to the labour and employment regulatory environment introduces more risk to the businesses and employees in the area and does not currently appear to be cost effective. CANCEA recommends that prior to implementing an Accommodation Tax on non-group overnight visitors to the area, policy makers should wait to see how the significant and sudden changes introduced by the Act affects businesses.



## 1.0 INTRODUCTION

Themes of fairness, living wages, equal pay and the general sharing of economic prosperity are aligned to most peoples' wishes in our mixed market Canadian and Ontario economies. Significant economic and societal changes have occurred over the decades that have seen a significant amount of economic pressure placed on many Ontario households. On June 1, 2017 Ontario introduced legislation, Bill 148: Fair Workplaces, Better Jobs Act, 2017 (the Act) which could be viewed as an attempt to address such themes in our society.

Likewise, a transient accommodation tax ("Accommodation Tax") can be viewed as a way to compensate cities for the services provided to tourists and visitors, with the advantage being that it falls on visitors as opposed to residents (Kitchen and Slack 2016). Though, for a given accommodation tax, 50% will go to the town, while the other 50% will go towards promoting the town.

Both initiatives are founded with good intentions. However, the significance, suddenness and size of the Act, along with the complementary Accommodation Tax creates an uncertain environment for Niagara-on-the-Lake businesses and households given that they must digest the increased costs that will be accompanied by both of these policies. This is especially true given the importance of tourism on the region.

Tourism is traveling to and staying in places for recreational, leisure or business purposes. Tourism comprises hospitality and transportation services. Hospitality is a part of the service industry that includes food services, entertainment and accommodation. Both tourism and hospitality are major industries for Niagara-on-the-Lake. It creates opportunities for employment in the service sector of the economy and has a positive impact on the growth of other industries, which is beneficial for the development of the local community. For 2018, the tourism industry in Niagara-on-the-Lake is expected to generate overnight visitor spending of \$60 million, of which 61% is attributed directly to hotel accommodation. This spending directly generates approximately:

- \$21.4 million in wages and other variable expenses;
- \$7.4 million in increased capital investment and profits.

Given the fact that the Act creates a significant amount of economic uncertainty, the implementation of the Accommodation Tax has the potential to further aggravate any uncertainty. This report evaluates the potential confluence of risk for the Niagara-on-the-Lake accommodation and food industries from the possible impacts of both the introduction of the Act and the Accommodation Tax, highlighting the need to understand the impacts of both policies prior to implementation.

## 2.0 UNCERTAINTIES FOR THE ECONOMIC DEVELOPMENT OF NIAGARA-ON-THE-LAKE

### 2.1 THE ACT: IMPACTS FOR ONTARIO

---

Soon after the Act was proposed, CANCEA released an academically peer-reviewed study with the purpose of identifying and assessing the key economic implications of the Act on various stakeholder groups, including workers, businesses and consumers (Canadian Centre for Economic Analysis 2017). The study was focused upon:

- The impacts of minimum wage increases of 20.7% in 2018 and a further 10% in 2019; and
- Other impacts of proposed employment and labour protection laws (e.g., temporary workers, contractors, equal pay for equal work provisions (part-time, full-time, temporary help versus permanent), scheduling, unionization, etc.).

While the Act has benefits for workers who have jobs and those businesses that can profit from increased disposable income circulating in the economy, the study also found that:

- Of those receiving benefits from minimum wage increases, only 11% of the increases will go to single parent or single income households. The remaining 89% will go to households without children under the age of 18 years of age, or dual income households;
- Ontario businesses will have to absorb at least 21% of the costs. They will respond to their increased costs by attempting to reduce the impact to them by: (1) changing the way they use current employees and hire future employees; and (2) passing costs onto their customers;
- With the theme of precarious employment comes also the theme of precarious business. Many small to medium size businesses that hire employees are in precarious situations themselves. These businesses are more exposed to the changes contained in the Act in all sectors, with the exception of the retail industry. The impacts of the Act on the food and accommodation industry are equally felt upon small and large businesses, albeit with regional differences;
- The other 79% of the costs will be avoided by businesses changing the way they operate. As a result, job growth in the economy is expected to be 47% lower putting potential jobs at risk; and
- For Ontario households, in addition to those affected by not being able to access jobs, the study found that their annual costs could increase up to \$1,300 per household depending upon the price response of different industries.

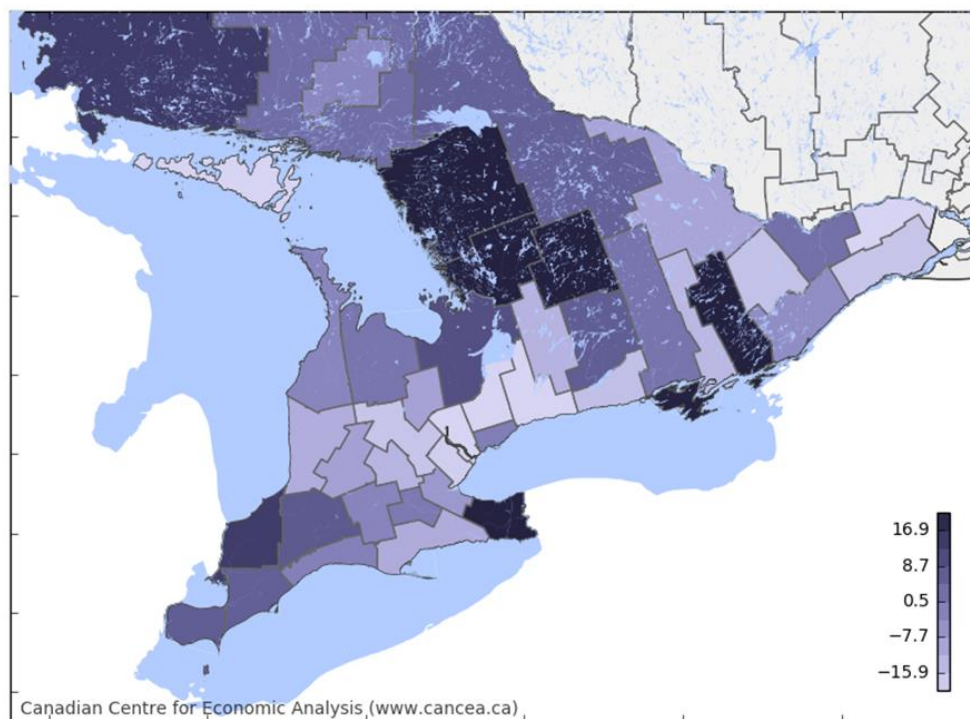
It is important to note that the study found that the Act would have different impacts on different industry sectors, different firm sizes, and different regions. For example, industries that have lower gross operating margins, lower wage levels or greater total labour components of production are likely to be more affected by labour changes. There are two key factors driving the variation of costs between the industry sectors –

the size of the industry in Ontario and the distribution of wages within the sector. Moreover, the Ontario economy is built upon a dominance of private small and medium sized enterprises (SMEs) that employ 56% of the Ontario private labour force. Considering the distribution of employees earning less than \$15/hr pay, the study found that 56% of those employees belong to SME firm sizes.

## 2.2 THE ACT: IMPACTS FOR NIAGARA REGION

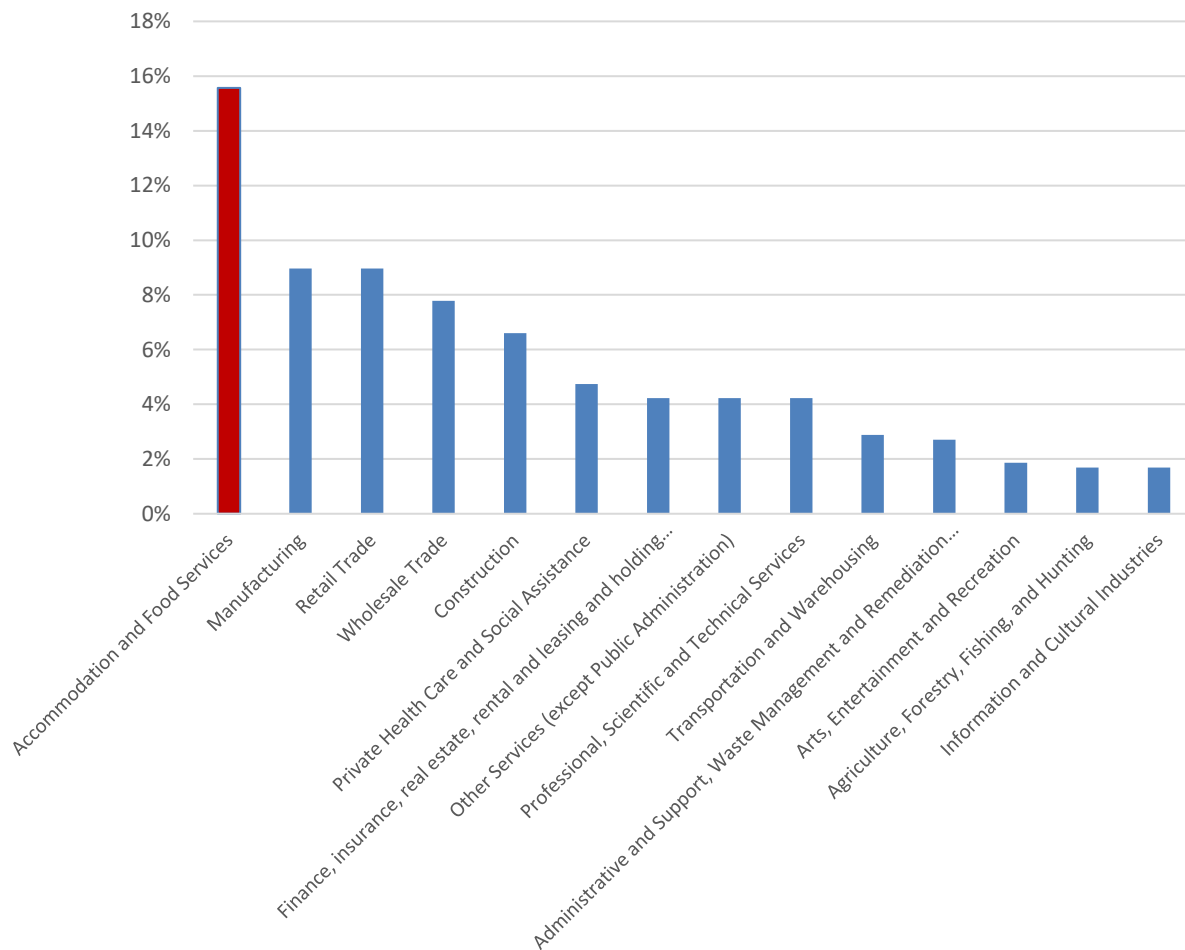
As mentioned previously, the distribution of firms across the province, both by size and type, means that the impacts of the Act are not felt uniformly across the province. Figure 1 highlights the regional disparity of the Act as it maps the regional variation of jobs at risk (relative to the size of their local labour force) relative to the provincial average. The relatively high proportion of jobs above minimum wage in the Greater Toronto Area (GTA) results in fewer jobs (as a percentage of all jobs in the region) at risk. The jobs most risk are in regions outside the GTA. For example, the large amount of employment in the Niagara Peninsula in the accommodation and food sector results in that region having one of the highest percentage of jobs at risk (Figure 1).

**Figure 1** Jobs at risk, regional impacts



Within the Niagara region, the Act has the potential to be particularly impactful given the heavy reliance of the area on the food and accommodation services sector. This sector is the third largest industry in the region with just under 25,000 employees<sup>1</sup> in 2016. Figure 2 highlights how, of the 6,000 jobs at risk in the Niagara region, accommodation and food service jobs at risk are at least twice as high as any other industry in Niagara, amounting to 1,000 jobs at risk, of which over 30% are located in Niagara-on-the-Lake.

**Figure 2** Niagara employment impacts (jobs at risk): percent share of jobs at risk

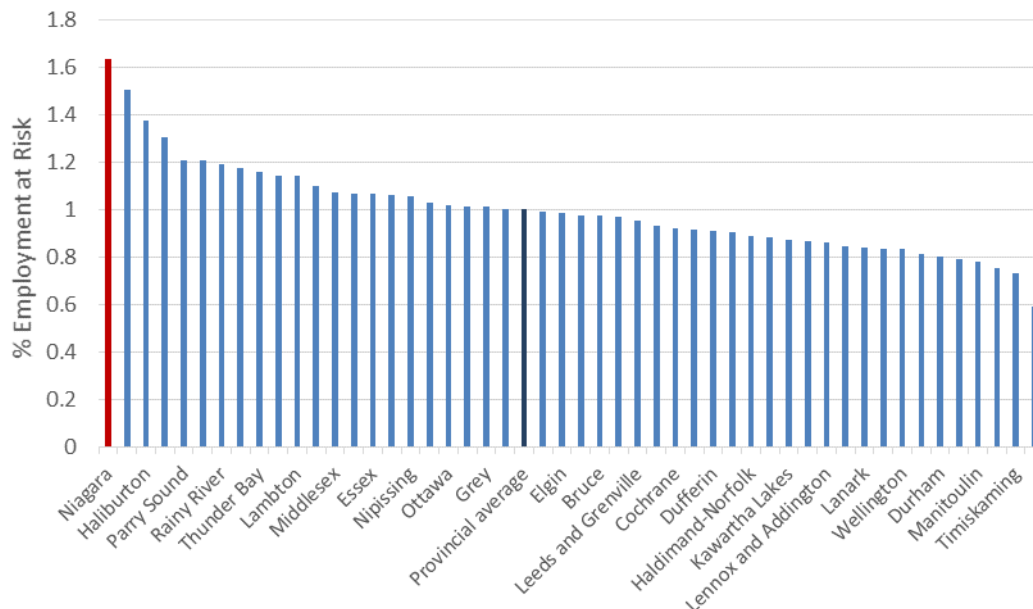


Furthermore, Figure 3 shows the distribution of the percent of accommodation and food employment at risk across the province. Compared to other regions, Niagara's accommodation and food industry is expected to have the highest incidence of accommodation and food jobs at risk in Ontario.

<sup>1</sup> Labour force survey estimates (LFS), employment by census metropolitan area based on 2011 Census boundaries and North American Industry Classification System (NAICS). Statistics Canada.



**Figure 3** Accommodation and food services employment impacts (% employment at risk)



## 2.3 THE ACT: IMPACTS FOR THE NIAGARA-ON-THE-LAKE OVERNIGHT ACCOMODATION SECTOR

For 2018, the Act alone is expected to cost the Niagara-on-the-Lake accommodation sector \$1.8 million in increased wage costs. With an expected price increase of 1.6%, there is also an impact upon overnight visitor demand (for pleasure, not for business) of 3,100 fewer visitors for the year. This has the following consequences:

- A decrease in profits and capital investment for the accommodation industry of \$1.5 million; and
- A decrease in profits and capital investment for those industries dependent upon overnight visitors of \$1 million.

For households in the region, their net situation in aggregate is a loss of \$111,000, with the components of the change being significant:

- Increased wages from accommodations industry of +\$1.8 million;
- Increased wages from other industries in the region of +\$8.7 million;
- Wage changes due to overnight visitor volume changes of -\$315,000;
- Wage changes due to other jobs at risk in the region of -\$5.7 million; and
- Increased household costs due to general price changes behind the Act of -\$4.5 million.

### 3.0 TRANSIENT ACCOMODATION TAX AND THE ACT

In the 2017 Ontario Budget, the provincial government drafted legislation in order to amend the *City of Toronto Act, 2006* (COTA) that would allow the City of Toronto to levy a tax on transient accommodations. Furthermore, there were stipulations that this would be extended to single-tier and lower-tier municipalities through proposed amendments to *the Municipal Act, 2001* (Ontario Ministry of Finance 2017).

Such forms of taxation are not unfamiliar to the accommodation industry. For example, many hotels already participate in a voluntary Destination Marketing Fee (DMF) program, which are industry-led initiatives that are used as an effective way to support regional tourism marketing development. They can be calculated in numerous ways, such as a flat rate per room night sold or a percentage of room revenues (Ontario Ministry of Tourism, Culture and Sport 2017).

For municipalities that have an existing DMF program, they would be expected to split the tax revenue with the appropriate not-for-profit tourism organization such that amounts match the total revenue generated by the existing DMF program (Ontario Ministry of Finance 2017). For municipalities without a DMF program, such as Niagara-on-the-Lake, at least 50% of the accommodation tax revenue will be shared with the Niagara-on-the-Lake Chamber of Commerce (or respective Regional Tourism Organization) (Ontario Ministry of Finance 2017).

We understand that up to a 3% Accommodation Tax is being discussed for Niagara-on-the-Lake, consistent with what has been introduced by other municipalities though it is subject to the discretion of municipalities and can exhibit a wide range. The risk is that the price, labour and capital effects of the Act will be compounded if the Accommodation Tax is implemented within the next 2 years. This may have unintended consequence which need to be considered. This is especially true given the fact that the establishments within the accommodation and food services are generally smaller enterprises and this sector is one of the sectors most at risk with the Act. Within the Niagara region, 88% of tourism accommodation establishments have under 50 employees (Ontario Ministry of Tourism, Culture and Sport 2017).

### 3.1 DEMAND SENSITIVITY OF TOURISM AND HOSPITALITY TO PRICE CHANGES

---

Tourism demand and what it is sensitive to (its elasticity) depend on many factors (e.g., population, incomes, competition, price, regional brand, and tastes). Substitute price elasticity and income elasticity are the determinants of tourism demand. These elasticities measure the percentage change in tourism demand as a result of percentage change in price or income. Price and income elasticity are very useful when considering the impacts of pricing, exchange rates and taxation.

A large number of empirical studies have attempted to estimate the price elasticity of demand for tourism and the results vary (Konovalova and Vidishcheva 2013, Peng, et al. 2015). Tourism demand varies

significantly as it depends on tourists' origin, destination and purpose of the travel. Tourists who travel for business seem to be less sensitive to price changes as they have less or no alternatives as opposed to leisure travel and conferences driven demand.

Holiday tourism and tourism related to visiting friends or relatives (VFR) are more price sensitive markets. For these purposes, it is reasonable and generally accepted that personal tourism has a price inelasticity of -1.23 and tourism related to VFR has a price inelasticity of -0.93 (Konovalova and Vidishcheva 2013). These price inelasticities are particularly relevant for the Niagara region given that 94% of its tourism industry is driven by either pleasure (58%), VFR (30%) or shopping, conventions or other (6%)<sup>2</sup>. Compared to the GTA, where almost half the amount (28%) of person visits are for pleasure and twice as many (17%) are for business (Ontario Ministry of Tourism, Culture and Sport 2017). Given the elasticities in Table 1, Niagara region would be at more risk than the GTA with the inclusion of an Accommodation Tax because while business travelers generally have less flexibility to postpone or cancel their trips, holiday tourism and visiting friends or relatives (VFR) tourism are price sensitive markets.

**Table 1** Price elasticities for tourism

Tourism purpose	Average price elasticity	Average change in demand after HST for a 1% change in costs
Pleasure	-1.23	-1.39%
Visiting friends or relatives	-0.93	-1.05%
Shopping, conventions or other	-1.23	-1.39%

The importance of this range shows the idiosyncratic impacts that a tax could have based on locations and the purpose of tourism to that region. That is, a hotel tax in one region may provide a good source of government revenue that does not cause much change in tourism, while a hotel tax in another may provide revenue but simultaneously cause a decrease in demand for accommodations by reducing tourism in the area, thereby negatively impacting the accommodation industry. Niagara-on-the-Lake is one such region where a negative impact could occur, tourism for pleasure accounts for 72% of their tourism (Ontario Ministry of Tourism, Culture and Sport 2017).

## 3.2 COMPETITION

The Accommodation Tax is also subject to the discretion of the municipalities. That means that the magnitude of the tax, or even whether a tax shall be levied, is subject to the individual municipalities. This creates the potential for inter-municipality, as well as inter-provincial, competition. As mentioned in the previous section, the price elasticities of demand for accommodation, specifically for pleasure and VFRs, is sensitive to price and therefore variable Accommodation Taxes could influence the travel decisions of

<sup>2</sup> Business accounts for the remaining 6%.

tourists. This could incentive tourists planning to visit one municipality to alter their decisions based on the increased costs brought about by the Accommodation Tax. Of course a set rate can be adjusted after implementation, but at that point significant losses to the accommodation industry could have already occurred. Furthermore, were these losses to occur in the same environment as the risks of the Act, then there could be additional risks due to the confluence of these two policies.

Another aspect of competition comes from shared accommodations, such as Airbnb. Although the legislation stipulates that the tax is applicable to all transient accommodations, which would include Airbnb and other online, non-hotel accommodations, whether they are applied by the municipality rests to be seen.

### 3.3 THE ACT AND ACCOMODATION TAX IMPACTS FOR NIAGARA-ON-THE-LAKE OVERNIGHT ACCOMODATION SECTOR

---

For 2018, the Act in combination with an Accommodation Tax of 3% (with a group business exemption) is expected to cost the Niagara-on-the-Lake 8,400 fewer visitors for the year. The consequences of which are:

- A decrease in profits and capital investment for the region's accommodation industry of \$2.1 million; and
- A decrease in profits and capital investment for those industries dependent upon overnight visitors of \$1.3 million.

For households in Niagara-on-the-Lake, their net situation in aggregate is near a loss of \$300,000, with the components of the change being significant:

- Increased wages from accommodations industry of +\$1.8 million;
- Increased wages from other industries in the region of +\$9.1 million;
- Wage changes due to overnight visitor volume changes of -\$850,000;
- Wage changes due to other jobs at risk in the region of -\$5.7 million;
- Increased household costs due to general price changes behind the Act of -\$4.5 million

For detailed results and assumptions, please refer to Appendix B and Appendix C, respectively.

## APPENDIX A. BIBLIOGRAPHY

- Airbnb. 2017. "In what areas is occupancy tax collection and remittance by Airbnb available?" *Airbnb*. Accessed November 3, 2017.
- Alternatives, Canadian Centre for Policy. 2017. *About This Blog*. <http://behindthenumbers.ca/about-this-blog/>.
- Canadian Centre for Economic Analysis. 2017. "Bill 148: Fair Workplaces, Better Jobs Act, 2017: Assessment of the Risks and Rewards to the Ontario Economy."
- Kitchen, H., and E. Slack. 2016. "More Tax Sources for Canada's Largest Cities: Why, What, and How?" Munk School of Global Affairs, University of Toronto, Institute on Municipal Finance and Governance.
- Konovalova, A.A., and E.V. Vidishcheva. 2013. "Elasticity of Demand in Tourism and Hospitality." *European Journal of Economic Studies* 4 (2).
- Ontario Ministry of Finance. 2017. "2017 Ontario Budget: A Stronger, Healthier Ontario."
- Ontario Ministry of Finance. 2017. *Stronger, Healthier Ontario Act (Budget Measures), 2017*. May 17. <https://news.ontario.ca/mof/en/2017/05/stronger-healthier-ontario-act-budget-measures-2017.html>.
- Ontario Ministry of Tourism, Culture and Sport. 2017. *Information Overview of Destination Marketing Programs in Ontario: Considerations for Tourism Organizations*. February 28. [http://www.mtc.gov.on.ca/en/invest/destination\\_marketing.shtml](http://www.mtc.gov.on.ca/en/invest/destination_marketing.shtml).
- . 2017. "Regional Tourism Profiles." *Ontario Ministry of Tourism, Culture and Sport*. August 16. Accessed November 03, 2017. <http://www.mtc.gov.on.ca/en/research/rtp/rtp.shtml>.
- Peng, B., H. Song, G.I. Crouch, and S.F. Witt. 2015. "A Meta-Analysis of International Tourism Demand Elasticities." *Journal of Travel Research* 54 (5): 611-633.
- Revenu Quebec. 2017. "Establishments subject to the tax on lodging." *Revenue Quebec*. <http://www.revenuquebec.ca/en/entreprises/taxes/hebergement/etablissementsvises.aspx>.
- Stiglitz, J.E. 2017. "Where modern macroeconomics went wrong." *NBER Paper Series Working paper* 23795: 1-43.



## APPENDIX B. DETAILED RESULTS

	Base Case for 2018	Bill 148 Only	Bill 148 with TAT 1%	Bill 148 with TAT 2%	Bill 148 with TAT 3%
<b>Scenario Settings</b>					
Bill 148 (0 or 1)	0	1	1	1	1
Bill 148 cost and price increases	0.00%	1.60%	1.60%	1.60%	1.60%
Pleasure overnight visitor demand change to 1% price change (from literature)	-1.23	-1.23	-1.23	-1.23	-1.23
Group business overnight visitor demand change to 1% price change (from literature)	0.00	0.00	0.00	0.00	0.00
Transient Accommodation Tax assumption	0.00%	0.00%	1.00%	2.00%	3.00%
Proportion of group business sales	28%	28%	28%	28%	28%
<b>Aggregate Scenario results</b>					
Expected overnight visitors	219,750	216,636	214,886	213,137	211,387
Pleasure	158,220	155,106	153,356	151,607	149,857
Business group	61,530	61,530	61,530	61,530	61,530
<b>Hotel GOS</b>					
Gross accommodation revenues	\$37,706,250	\$37,766,719	\$37,461,677	\$37,156,635	\$36,851,592
Accommodation costs fixed	-\$19,607,250	-\$19,607,250	-\$19,607,250	-\$19,607,250	-\$19,607,250
Accommodation costs variable	-\$13,574,250	-\$13,381,908	-\$13,273,822	-\$13,165,737	-\$13,057,651
Increase in costs from Bill 148	\$0	-\$1,799,636	-\$1,785,100	-\$1,770,565	-\$1,756,029
Hotel marketing expense offset					
<b>GOS</b>	<b>\$4,524,750</b>	<b>\$2,977,925</b>	<b>\$2,795,504</b>	<b>\$2,613,083</b>	<b>\$2,430,663</b>
TAT collected	\$0	\$0	\$267,350	\$528,599	\$783,748
HST collected	\$4,901,813	\$4,909,673	\$4,870,018	\$4,830,362	\$4,790,707
<b>Other overnight visitor industries affected GOS</b>					
Overnight visitor revenues	\$24,125,000	\$24,163,689	\$23,968,519	\$23,773,348	\$23,578,178
Fixed costs	-\$12,545,000	-\$12,545,000	-\$12,545,000	-\$12,545,000	-\$12,545,000
Variable costs	-\$8,685,000	-\$8,561,937	-\$8,492,782	-\$8,423,627	-\$8,354,472
Increase in costs from Bill 148	\$0	-\$1,151,433	-\$1,142,133	-\$1,132,833	-\$1,123,533
<b>GOS</b>	<b>\$2,895,000</b>	<b>\$1,905,319</b>	<b>\$1,788,604</b>	<b>\$1,671,888</b>	<b>\$1,555,173</b>
<b>Change from base case</b>					
<b>Hotel Industry</b>					
Expected overnight visitor change	0	-3,114	-4,864	-6,613	-8,363
<b>GOS</b>	<b>\$0</b>	<b>-\$1,546,825</b>	<b>-\$1,729,246</b>	<b>-\$1,911,667</b>	<b>-\$2,094,087</b>
<b>Other Industries</b>					
Expected overnight visitor change	0	-3,114	-4,864	-6,613	-8,363
<b>GOS</b>	<b>\$0</b>	<b>-\$989,681</b>	<b>-\$1,106,396</b>	<b>-\$1,223,112</b>	<b>-\$1,339,827</b>
<b>Total GOS impact</b>	<b>\$0</b>	<b>-\$2,536,506</b>	<b>-\$2,835,642</b>	<b>-\$3,134,778</b>	<b>-\$3,433,915</b>
<b>Regional households</b>					
Hotel industry	\$0	\$1,799,636	\$1,785,100	\$1,770,565	\$1,756,029
Other industries (those with a job)	\$0	\$8,673,772	\$8,807,447	\$8,938,072	\$9,065,646
Wage changes due to visitor volume changes	\$0	-\$315,405	-\$492,645	-\$669,886	-\$847,127
Other jobs at risk in the region	\$0	-\$5,725,471	-\$5,725,471	-\$5,725,471	-\$5,725,471
Increased household costs	\$0	-\$4,544,000	-\$4,544,000	-\$4,544,000	-\$4,544,000
<b>Net household</b>	<b>\$0</b>	<b>-\$111,468</b>	<b>-\$169,569</b>	<b>-\$230,721</b>	<b>-\$294,923</b>
<b>Governments</b>					
TAT collected	\$0	\$0	\$267,350	\$528,599	\$783,748
HST collected by hotel industry	\$0	\$7,861	-\$31,795	-\$71,450	-\$111,105

## APPENDIX C. ASSUMPTIONS AND SETTINGS

### C.1. MODEL KEY DATA SETTINGS

Parameter	Assumption
Bill 148 cost increases (2018)	From legislation. For 2018 set at \$2.40 for those directly affected by increases in minimum wage
Bill 148 price increases	Expected basic price increase for the accommodation sector from CANCEA Report Sept. 2017 of 1.6%.
Transient Accommodation Tax assumption	Assumption that is varied from 0% to 3% and is applied the same way HST is applied on what the business charges the customer
Demand change to 1% price change (from literature)	From literature for pleasure purpose accommodation reasons. A 1% change in prices leads to a -1.23% change in demand. Business is price inelastic at 0% change.
Proportion of workforce with minimum wage	From Statistics Canada input/output tables which is 65% of employees for the accommodation and food sector
Accommodation costs fixed %	From Statistics Canada input/output tables which is 52% of gross revenues for the accommodation and food sector
Accommodation costs variable %	From Statistics Canada input/output tables which is 36% of gross revenues for the accommodation and food sector
Gross operating surplus (GOS)	Equal to profit plus new capital investment for the year. From Statistics Canada input/output tables which is 12% of gross revenues for the accommodation and food sector
Base case	2018 expected overnight visitors of 219,750 which is before Bill 148 and Accommodation Tax related price changes that induce changes to demand (i.e., sales).
New case	What is expected in 2018 overnight visitors after accounting for Bill 148 and Accommodation Tax related price changes that induce changes to demand (i.e., sales).
Accommodation Tax collected	Assumed Accommodation Tax percent times gross revenues from accommodation operations from non-group business bookings.

## C.2. HOTEL GROSS OPERATING SURPLUS: BASIC CALCULATIONS

---

Parameter	Assumption
Gross accommodation revenues	Expected overnight visitors times price charged by hotel before HST and Accommodation Tax
Group business bookings	Percent of total revenues set at 28% through discussions with local businesses
Accommodation costs fixed	Gross accommodation revenues (base case) times accommodation costs fixed %
Accommodation costs variable	Gross accommodation revenues (new case) times accommodation costs variable %
Increase in costs from Bill 148	65% of accommodation and food employees employed by hotel times proportion of workforce with minimum wage in accommodation and food times 20.7% increase in wage per hour (being wage change for 2018)
GOS	Gross accommodation revenues less Accommodation costs fixed less Accommodation costs variable less Increase in costs from Bill 148 plus Hotel marketing expense offset

## C.3. OVERNIGHT VISITOR INDUSTRIES AFFECTED: BASIC CALCULATIONS

---

Parameter	Assumption
Revenues/sales from overnight visitors	Expected overnight visitors times sales per visitor before HST and Accommodation Tax
Costs fixed	Revenues (base case) times costs fixed %
Costs variable	Revenues (new case) times variable %
Increase in costs from Bill 148	65% of employees employed by industry times proportion of workforce with minimum wage times 20.7% increase in wage per hour (being wage change for 2018)
GOS	Gross revenues less Costs fixed less Costs variable less Increase in costs from Bill 148

#### C.4. CHANGE FROM BASE CASE: BASIC CALCULATIONS

---

Parameter	Assumption
For businesses in accommodation, food and other overnight visitor dependent businesses	Expected financials after Bill 148, HST and Accommodation Tax less Expected financials before Bill 148, HST and Accommodation Tax less
Regional households	Increased wages from accommodation industry Increased wages from other industries (those with a job) Increased wages from Accommodation Tax raised (at 50% of Accommodation Tax raised) Change in wages due to overnight visitor volume changes Change in wages from other jobs at risk in the region (about 3.6% of all future employees for the region) Increased household costs due to Bill 148 general price increases (about \$640 per household)