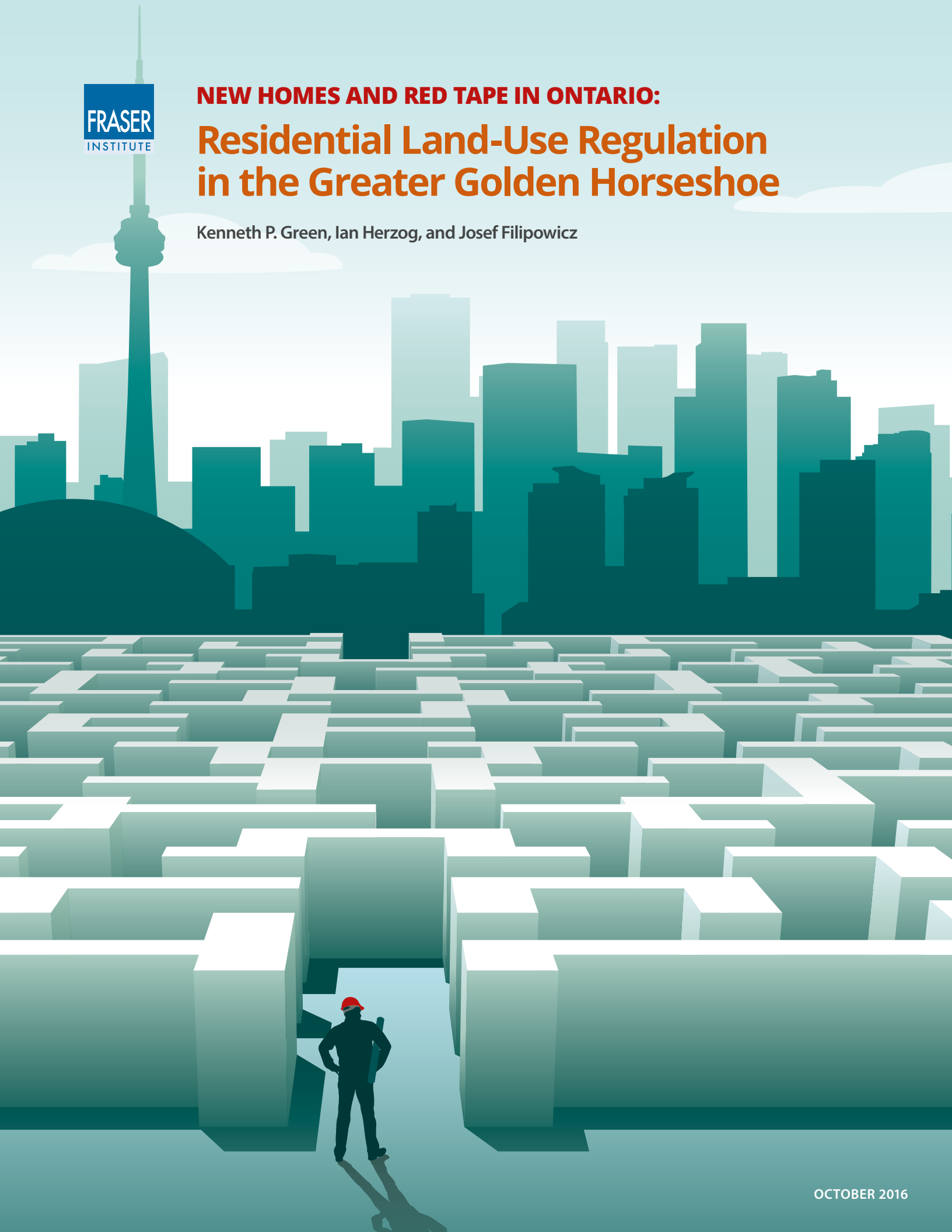


**NEW HOMES AND RED TAPE IN ONTARIO:**

# Residential Land-Use Regulation in the Greater Golden Horseshoe

Kenneth P. Green, Ian Herzog, and Josef Filipowicz





October 2016 • Fraser Institute

# **New Homes and Red Tape in Ontario**

**Residential Land-Use Regulation  
in the Greater Golden Horseshoe**

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## Executive Summary

As an increasing number of people move to major Canadian cities, housing prices have continued to rise in its most desirable markets. With growing concern about housing availability and prices, understanding how public policy affects the supply of new homes is critical. The Fraser Institute's survey of housing developers and homebuilders provides new insight into this issue. This report is part of a series tallying survey data to represent industry professionals' experiences and opinions of how residential development is regulated in cities across Canada. This report presents survey results for cities in Ontario's Greater Golden Horseshoe (GGH).

Estimates of typical project approval timelines in GGH cities range from 14.4 months in Burlington and 15.1 months in Barrie, to 22.3 months in Clarington and 24.3 months in Georgina. Toronto's estimated timeline is shorter than the regional average, at 17.7 months. Timeline uncertainty's deterrent to homebuilding is strongest in Barrie.

Reported compliance costs and fees add up to a low of \$21,000 per home built in Hamilton and a high of \$60,500 per home in Oakville. Reported compliance costs in Toronto average \$46,570 per unit.

The survey reports that zoning classifications need to be changed to accommodate more than 50% percent of new residential development in 28 out of 32 cities. Estimates of rezoning's effect on approval timelines range from under one additional month in King Township to 11.25 months in Hamilton.

Council and community opposition to residential development is perceived as strongest in cities where dwelling values are highest, raising questions about the causes and consequences of local resistance to new housing. The strongest opposition is reported in King Township, Toronto, and Oakville. This opposition is typically not perceived as a significant deterrent to building in Brampton, Oshawa, and Burlington.

While market forces tend to dominate development decisions, industry professionals also expressed a range of specific policy concerns. For example, survey respondents indicate that increasing stringency in municipal and provincial regulation limits consumer choice, and forces smaller builders out of the marketplace. The need for numerous reviews and permissions from various parties, rather than a single streamlined process, is another commonly expressed concern, and one that has grown in recent years. Finally, local real estate professionals suggest that

housing affordability may be adversely affected by provincial land-use policies in years to come. The 7,200 km<sup>2</sup> of rural land virutally withdrawn from development by Ontario's Greenbelt can pose unique challenges to future growth in the Greater Golden Horseshoe.

The publication provides a summary index of residential land-use regulation that is calculated by tallying across five key components of regulation's impact—Approval Timelines, Council and Community, Cost and Fees, Rezoning Prevalence, and Timeline Uncertainty—in the 23 cities that generated sufficient survey responses. This index ranks Burlington as the least regulated and the King Township as the most. Toronto, the GGH's core, ranks worse than most at 20<sup>th</sup> of 23 municipalities.

# 1 Introduction

As an increasing number of people move to Canada's major cities, housing prices have continued to rise in its most desirable markets. With growing concern about housing availability and prices, understanding how public policy affects the supply of new homes is critical. Evidence of the importance of land constraints for determining differences in the supply of new housing, and price growth, across American housing markets is mounting (see Saiz, 2010 and Saks, 2008 for examples). Systematic comparisons of land-use regulations across Canadian cities can help identify where they are cost effective and efficient, and where these regulations burden local economies and aspiring home-owners.

Ontario's Greater Golden Horseshoe (GGH), a region specifically addressed by current provincial land-use planning (Ontario Ministry of Infrastructure, 2006), encompasses over one hundred municipalities<sup>1</sup> in Southern Ontario and was home to two thirds of Ontario's population as of the 2011 census (see figure 1).

The GGH, Canada's most populous urban area, is primarily located along the north and west shores of Lake Ontario, within a two hours' drive from the United States border. Although this region is mostly surrounded by flat or rolling farmland, presenting little geographical impediment to growth, much of it falls within the Greenbelt, a 7,200 km<sup>2</sup> band of protected rural land. The Greater Toronto housing market has seen prices rise by 79.3% between January 2006 and January 2016 (MLS, 2016) while consumer prices rose by 20% (Statistics Canada, 2016).

The Fraser Institute has conducted two surveys—one in 2014, one in 2016—of developers and homebuilders to assess how residential land-use regulation affects the supply of new housing. The data collected represent the experiences and opinions of industry professionals across Canada. This report presents survey results for cities in GGH, describing the length and uncertainty of approval timelines for residential development projects, compliance costs and fees, how frequently respondents must rezone property, and how they gauge local and political opposition to their projects.

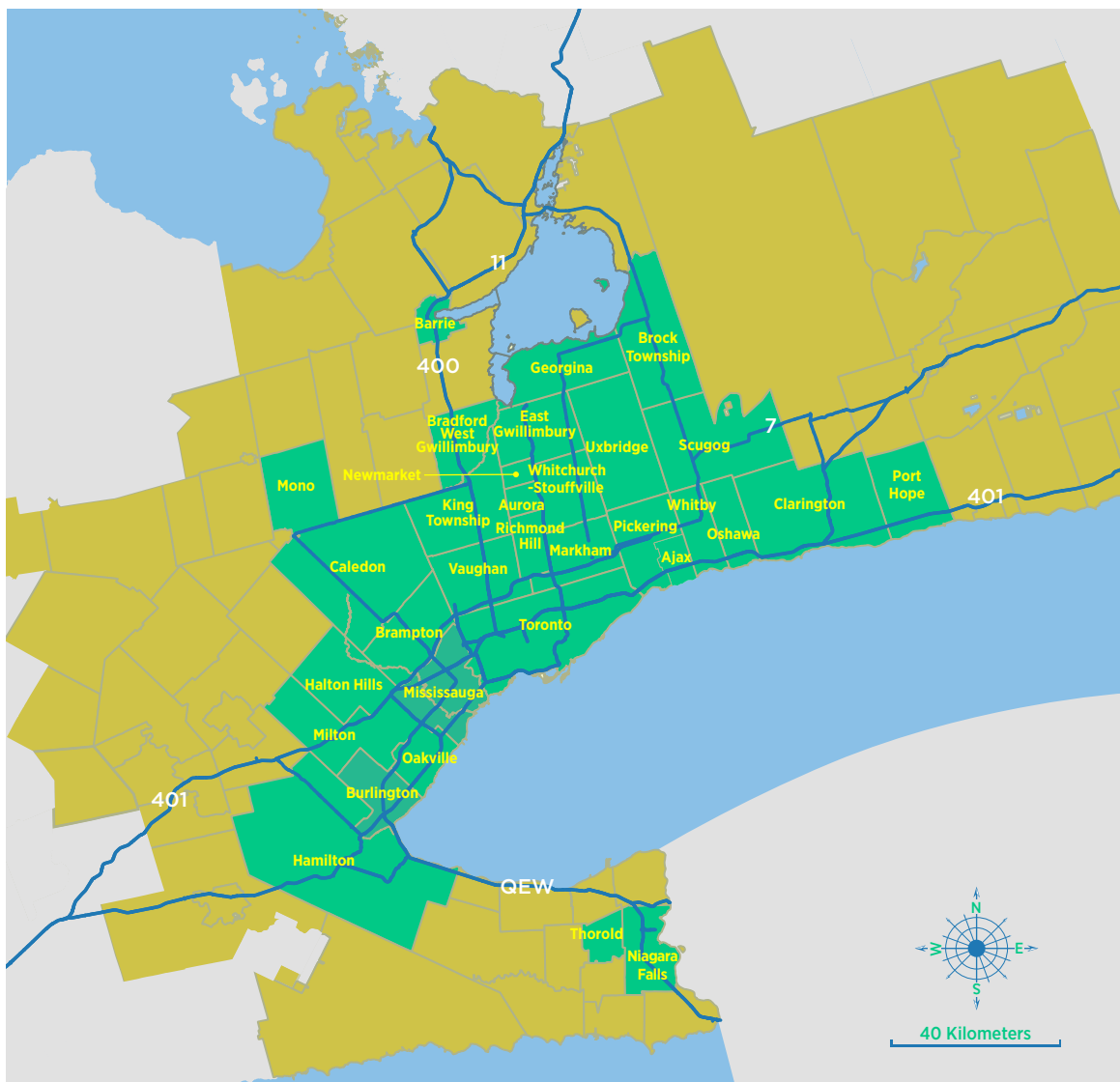
The Fraser Institute's Survey of Land-Use Regulation continues work done in the United States, developing insights into policy outcomes in Canadian cities. Recent US work that inspired this survey includes Gyourko, Saiz, and Summers (2008),

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1. The GGH includes 89 lower-tier municipalities (e.g. Mississauga, Niagara Falls), 11 upper-tier municipalities (e.g. York Region, Waterloo Region), and 10 single-tier municipalities (e.g. Toronto, Guelph).

who conducted a nationwide survey measuring these regulatory processes and their outcomes. Another series of surveys was used to understand land-use regulation in the San Francisco Bay Area, incorporating perspectives of city officials and residential developers (Calfée et al., 2007; Quigley, Raphael, and Rosenthal, 2007). For a more in-depth exploration of research into regulation’s economic impacts, see Green, Herzog, and Filipowicz, 2015b.

**Figure 1: Jurisdictions from Ontario’s Greater Golden Horseshoe discussed in this report**





## 2 The Data

### 2.1 Survey questionnaire

The Fraser Institute's Survey of Residential Land-Use Regulation was designed to capture key insights into residential development and building professionals' experiences with land-use regulation. Its design is an extension of work by Calfee et al. (2007). Their survey was meant to support data from city planning officials. We have modified their methods to form a standalone survey of residential developers and home builders describing land-use regulation. Respondents were directed to focus on municipalities and types of residential development with which they were familiar, giving accounts of:

- the typical length and uncertainty of approval timelines;
- typical regulatory compliance costs and fees;
- the role of politicians and community groups in residential development;
- the effects of zoning bylaws and official plans;
- uncertainty in possible land uses prior to applications for building permit or rezoning

Responses were measured on scales that reflect directly measurable outcomes where possible (months, dollars, or proportion of projects affected), and clearly labeled 5-point scales otherwise. We distinguish single-family, clearly defined as single detached homes, from multiple-dwelling developments, which we specify as including townhouse, semi-detached, and apartment units<sup>2</sup>—consistent with the Canada Mortgage and Housing Corporation's definition (CMHC, 2014). The survey was administered electronically and distributed through developer and homebuilder trade associations. For a list of survey questions, see [Appendix 4](#).

### Survey response and the sample

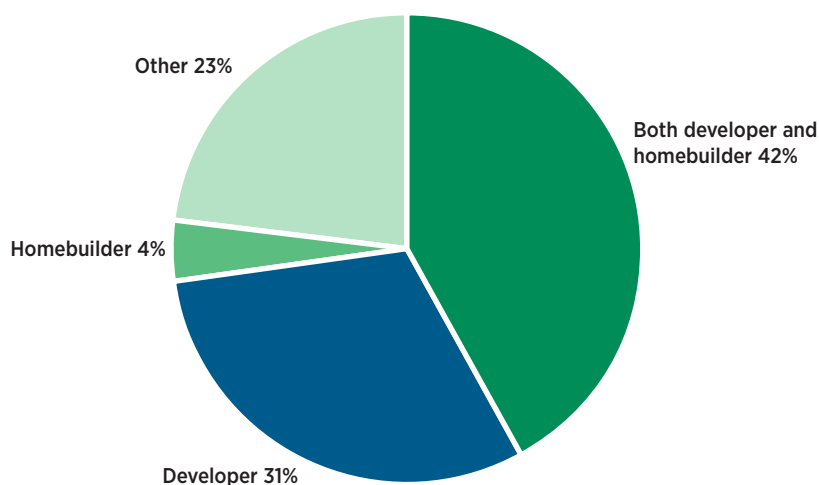
The survey was conducted over two periods, in the Fall of 2014 and the Spring of 2016, and distributed primarily through industry associations. The regulatory data used in this report were obtained from 93 respondents in the Greater Golden Horseshoe (GGH). The average respondent answered questions for 8.6

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2. High-rise condominiums are included in the category of multiple-dwelling developments.

cities. Although respondents' identities are not known, their answers generated a range of results that is similar to other reports on the residential development process in the GGH.<sup>3</sup> **Figure 2** shows that the majority of survey respondents identified themselves as either developers and homebuilders, or solely developers.<sup>4</sup> **Figure 3** shows that only 14% of respondents specialize in detached homes in the GGH. Eighty-three percent of respondents who have worked on a single-family project in the past 10-to-12 years also produce multiple dwelling developments.

**Figure 2: Respondents from Ontario's Greater Golden Horseshoe to the Survey of Residential Land-Use Regulation, by profession (%)**



Note: Homebuilder or developer refers to a respondent who falls in one category but not the other. Many firms do several related types of work, but these two broad categories are useful for understanding the industry.

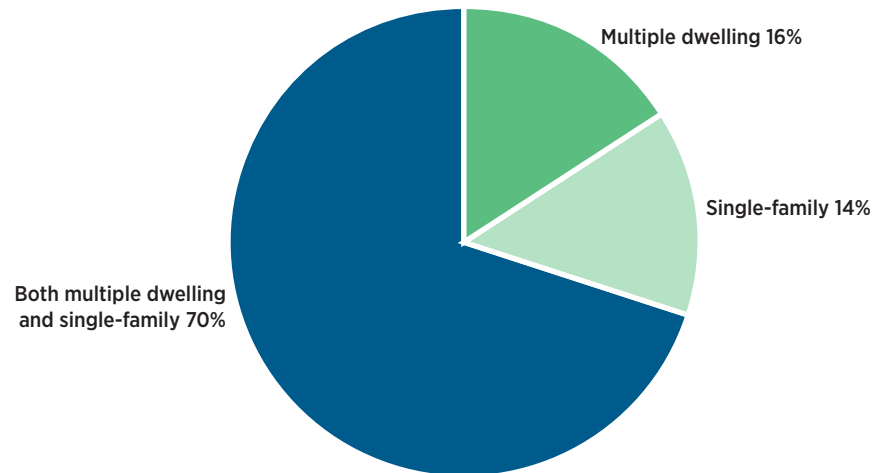
Other includes development planning, engineering, brokerage, and other consulting firms.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

**3.** The 2012 *Canada-Wide Development Process Survey Report* (2013) by the Real Property Association of Canada (REALpac) produced a similar range of per-unit costs and average approval timelines. However, our results are not directly comparable to REALpac's findings. We collect less detailed, but nationally comparable, data focusing on average total compliance costs and approval timelines, while the *Canada-Wide Development Process Survey Report* focuses on the specific fees and timelines associated with individual development-application steps (e.g. zoning by-law amendments, plans of subdivision, and city plan amendments) in key cities.

**4.** The terms "developer" and "homebuilder" are not universally defined, and share a degree of overlap. However, they are considered distinct professions by the Canadian Home Builders' Association (2011), and the Building Industry and Land Development Association, among others. In general, homebuilders are primarily concerned with the construction of new housing, but may also include renovators and contractors. Developers are primarily responsible for the servicing and subdivision of land. Many firms conduct both of these roles.

**Figure 3: Respondents from Ontario's Greater Golden Horseshoe to the Survey of Residential Land-Use Regulation, by type of development (%)**



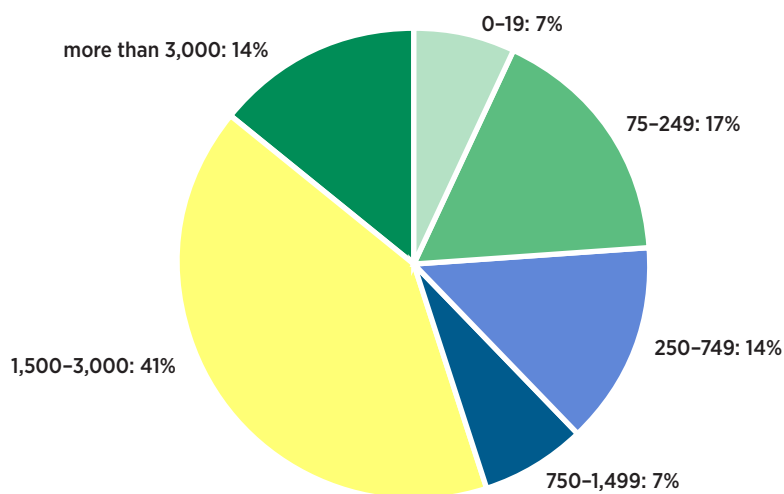
Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

This report presents several measures of regulation based on the survey data. We do not report results for categories based on fewer than three responses and we indicate where they are based on fewer than five. The number of cities presented in each section of our analysis varies alongside the number of responses to each question in our survey. Each figure presented in this study includes a regional average. This average is calculated across all responses from the GGH, rather than across cities. Since results are suppressed in cities with few respondents, the regional average of each indicator generally will not coincide with the average of city-level indexes presented.

Without knowing the market shares of companies responding to the survey it is difficult to calculate a meaningful response rate. For example, if one developer represents 60% of new home-building in one city, that developer's response is arguably more significant than all other responses from that city combined.<sup>5</sup> Our survey attempts to approximate scale by asking respondents how many units they currently have in development. Of the respondents who disclosed the scale of their operations in the GGH, *the largest portion by far have between 1,500 and 3,000 units underway (figure 4).*

5. Conversely, one can speculate that it may be difficult for a new developer or homebuilder to compete successfully against incumbents, who know the nuances of each city's regulatory process. If this is true, more highly regulated cities would have fewer developers (each with a large market share), making the experiences of smaller firms important for gauging barriers to access.

**Figure 4: Respondents from Ontario’s Greater Golden Horseshoe to the Survey of Residential Land-Use Regulation, by number of units currently in development (%)**



Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

**Table 1** reports characteristics of cities described in this report, all data are from 2011, the most recent census year. Toronto—an amalgamation of six municipalities that were dissolved in 1998—is the most populous city listed and surpassed in surface area only by Hamilton and Caledon. With single detached dwellings representing only 26% of the city’s occupied stock, Toronto is densely settled relative to most cities in the region. Mississauga is the only other city in the GGH where multiple-dwelling homes make up more than half of occupied housing.

Toronto was the most popular commuting destination for the first nine cities listed in table 1. Despite differences in reported dwelling values and built form, it is useful to think of these cities as common homes for those working in the region’s core. However useful, there are caveats to this interpretation. While 27% of King Township commuters work in Toronto, King has nearly as close a connection to Vaughan, the destination for 23% of the city’s commuters. Several GGH cities, including Barrie, Hamilton, and Niagara Falls, are only tangentially connected to this broad, polycentric, region’s core.

**Table 1: Characteristics of cities in the GGH as of the 2011 census**

	Population	Land area (km <sup>2</sup> )	Single detached dwellings <sup>1</sup> (%)	Median dwelling value <sup>2</sup> (\$)	Median commute (minutes) <sup>3</sup>	Most common place of work and percentage of commuters
Toronto	2,615,060	630	26%	\$401,400	30.4	81%
Markham	301,709	213	64%	\$500,741	30.4	48%
Vaughan	288,301	274	68%	\$527,560	30.1	43%
Richmond Hill	185,541	101	62%	\$550,573	30.6	41%
Whitby	122,022	147	71%	\$341,505	30.1	32%
Ajax	109,600	67	66%	\$333,486	35.1	<i>Toronto</i> 49%
Pickering	88,721	232	63%	\$349,486	30.6	53%
Aurora	53,203	50	62%	\$448,626	30.4	28%
Whitchurch-Stouffville	37,628	206	79%	\$473,318	30.4	35%
King Township	19,899	333	92%	\$647,478	30.4	27%
Mississauga	713,443	292	39%	\$401,175	25.9	<i>Mississauga</i> 55%
Milton	84,362	363	63%	\$420,324	30.5	29%
Newmarket	79,978	38	59%	\$399,632	25.9	<i>Newmarket</i> 36%
East Gwillimbury	22,473	245	84%	\$400,857	30.0	25%
Mono	7,546	278	97%	\$558,161	30.1	<i>Orangeville</i> 33%
Thorold	17,931	83	72%	\$219,496	15.6	<i>St Catharines</i> 43%
Barrie	135,711	77	62%	\$276,279	20.1	62%
Bradford West Gwillimbury	28,077	201	75%	\$348,511	30.4	24%
Brampton	523,911	266	53%	\$359,741	30.1	37%
Brock Township	11,341	423	87%	\$250,606	30.4	39%
Burlington	175,779	186	52%	\$399,402	20.7	44%
Caledon	59,460	688	85%	\$474,087	30.6	23%
Clarington	84,548	611	79%	\$275,315	21.0	27%
Georgina	43,517	288	83%	\$280,275	30.7	<i>within city</i> 27%
Halton Hills	59,008	276	74%	\$400,491	30.1	33%
Hamilton	519,949	1,117	58%	\$275,620	20.6	69%
Niagara Falls	82,997	210	68%	\$200,611	15.3	66%
Oakville	182,520	139	63%	\$510,886	25.8	36%
Oshawa	149,607	146	56%	\$240,415	20.5	42%
Port Hope	16,214	279	75%	\$250,187	20.3	46%
Scugog	21,569	475	90%	\$341,433	30.1	34%
Uxbridge	20,623	421	83%	\$400,657	30.7	30%

Notes: 1. Percentage of occupied private dwellings The census defines single detached dwellings as those with open space on all sides, and no dwellings either above or below. 2. Dwelling value is dollar amount (in CDN\$2011) expected by the owner if the dwelling were to be sold. Reported for owner-occupied, non-farm dwellings. 3. Commute time is how many minutes it took for a person to travel from home to work. Reported for individuals age 15 years and older in private households who worked at some time between January 1, 2010 and May 2011. Typically refers to place of employment and residence at the time of the survey.

Sources: Statistics Canada 2013a, 2013b, 2012; authors' calculations.

## 3 Survey Results

### 3.1 Approval timelines

Survey respondents were asked to estimate approval timelines for standard single-family and multiple-dwelling projects that do and do not require rezoning (a process described in section 3.3). Between one and four timeline entries per city are recorded for each respondent, depending on the types of work that they do in each city. For each type of work, respondents were asked to select one of 7 ordered choices: 2 months or less, 3 to 6 months, 7 to 10 months, 11 to 14 months, 15 to 18 months, 19 to 23 months, and 24 months or more.

The Approval Timeline Index (ATI) is the city average of survey respondents' timeline estimates. To calculate this average, each bin was assigned its midpoint,<sup>6</sup> and those that input a timeline of three or more years were omitted from the Approval Timeline Index. These high outliers make up 3% of average approval timeline entries.

Of the 28 cities represented in [figure 5](#), all but five have reported timelines in the range of 15 to 20 months. Substantial differences in timelines in cities at the low end (Burlington and Barrie) and high end (Uxbridge, Clarington, and Georgina) of the range are apparent. While municipalities with relatively short reported approval timelines are located across the region, those in the Regional Municipality of Halton<sup>7</sup> are roughly concentrated in the shortest third of cities. Conversely, most municipalities in the long half of the GGH's ATI ranking are located in the regional municipalities of York and Durham, to the north and east of Toronto<sup>8</sup> (12 of 14 cities in the long half). Additional measures of approval timelines, broken down by housing type (single-family or multiple dwelling) and by projects requiring rezoning compared to those not requiring rezoning, are presented in [Appendix 2](#).

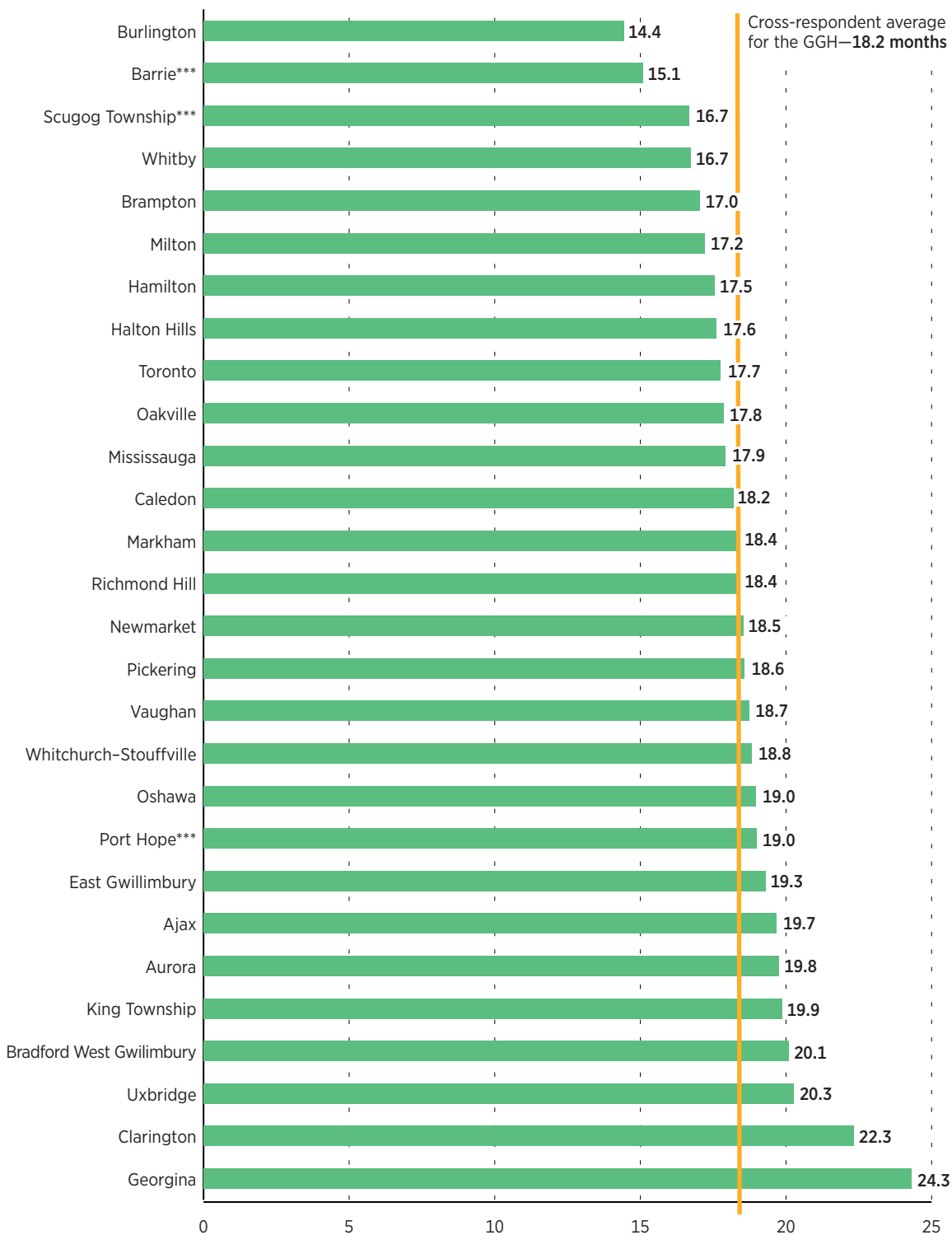
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6. Timelines in months were assigned to bins as follows: a period of 2 months or less is taken as 1 month, 3 to 6 months as 4.5 months, 7 to 10 months as 8.5 months, 11 to 14 months as 12.5 months, 15 to 18 months as 16.5 months, 19 to 23 months as 21 months, and 24 months or more as 28 months, unless the respondent opted to input a timeline estimate (which the survey encouraged, but was not always done).

7. Regional municipalities are upper-tier municipal governments unique to Ontario. They are broadly comparable to counties in other provinces or the United States. Halton includes Burlington, Halton Hills, Milton, and Oakville.

8. York includes Aurora, East Gwillimbury, Georgina, King Township, Markham, Newmarket, Richmond Hill, Vaughan, and Whitchurch–Stouffville. Durham includes Ajax, Brock Township, Clarington, Oshawa, Pickering, Scugog, Uxbridge, and Whitby.

**Figure 5: The Approval Timeline Index (2016) for Ontario’s Greater Golden Horseshoe—typical approval timeline, in months**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

The Approval Timeline Index is influenced by the type of project done by survey respondents, which varies across cities. In the example of an extreme case where no respondent describes single-family development, the ATI would be based entirely on accounts of the approval process for multiple-dwelling building. The ATI is deliberately constructed this way, to represent the average approval timeline for typical housing developments in each city.

### 3.2 Timeline uncertainty

In addition to the average approval time for a project, developers may also take the variation in approval times into account when considering projects. To assess the effect of timeline uncertainty in each city, we asked developers how this uncertainty affects both multiple-dwelling and single-family development in each city. Responses are measured on a 5-point scale: [1] encourages development; [2] not a deterrent to development; [3] mild deterrent to development; [4] Strong deterrent to development; and [5] would not pursue development due to this factor. The Timeline Uncertainty Index is the average response to this question in each city (figure 6).

Average reported ratings of timeline uncertainty deviate little from the centre of this measure's 5-point scale. Timeline uncertainty is rarely absent to a degree that would encourage development, but also tends not to present a strong deterrent to development in this region. Vaughan presents the least uncertainty at 2.6 (between no deterrent and a mild deterrent on average), and Barrie presents the most at 3.5 (between a mild and strong deterrent). Toronto is in the high end of this range, presenting a mild deterrent to development.

Approval timelines are an important component of established measures of residential land-use regulation (Gyourko, Saiz, and Summers, 2008; Quigley, Raphael, and Rosenthal, 2007). Long and uncertain approval timelines can make the supply of new housing less responsive to demand, with negative consequences for anyone looking to enter the market (see Green, Herzog, and Filipowicz, 2015b, Green, Filipowicz, Lafleur, Herzog, 2016, and Mayer and Somerville, 2000 for a more detailed discussion).

### 3.3 Compliance costs and fees

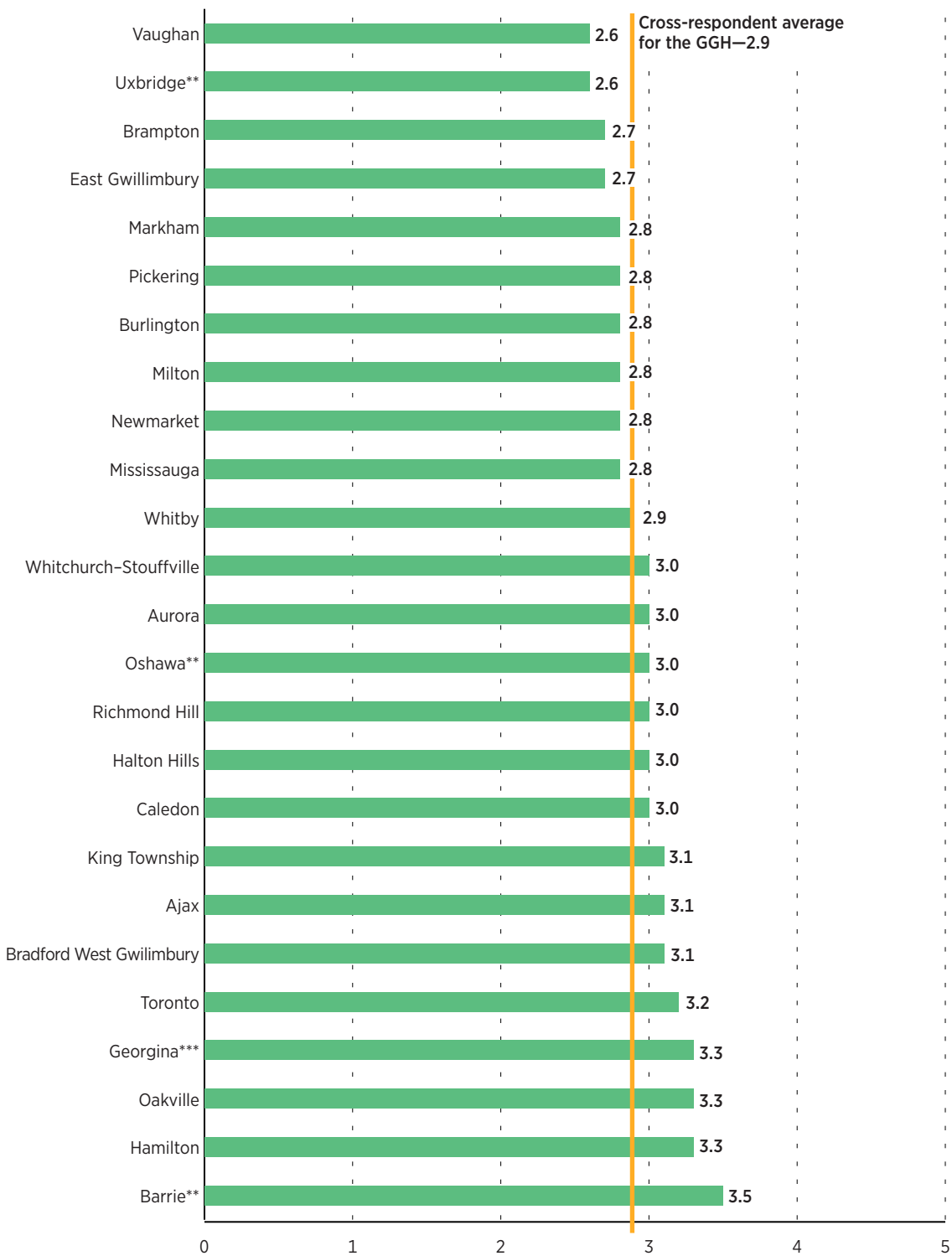
We asked respondents to estimate the sum of regulatory compliance costs and fees accrued per dwelling unit built for standard single-family and multiple-dwelling projects.<sup>9</sup> The survey offered 7 ordered choices: Less than \$1,000 per unit; \$1,000 to

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9. Specifically, we asked for estimates of the cost (per dwelling unit) of the project approval and regulatory compliance process in each city. The survey specified that this includes all administration, processing, and direct compliance costs. Appendix 4 presents the exact wording of the survey questionnaire.



**Figure 6: The Timeline Uncertainty Index (2016) for Ontario’s Greater Golden Horseshoe**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

\$9,999 per unit; \$10,000 to \$19,999 per unit; \$20,000 to \$34,999 per unit; \$35,000 to \$49,999 per unit; \$50,000 to \$75,000 per unit; and more than \$75,000 per unit. Respondents had the option to specify a cost if they selected the highest bin.

The Cost and Fees Index (CFI) is the city average of survey respondents' compliance costs and fee estimates. To calculate this average, each bin was assigned its midpoint<sup>10</sup> and those who input a cost of \$100,000 or more were omitted. In total these high outliers account for under 4% of all cost entries in the region.

**Figure 7** shows CFI ratings in the 23 GGH municipalities where we have enough data to measure regulatory costs of residential development reliably. At just under \$20,000 per unit, Hamilton's CFI is by far the lowest in the region, followed by Burlington, with a CFI of \$32,500. Oakville, Richmond Hill, and King Township have the highest reported compliance costs—all in the \$55,000-to-\$61,000 range. Perhaps most surprising is the difference in CFI between the neighbouring cities of Burlington and Oakville. The spread in regulatory costs between these cities is almost \$30,000; Burlington's costs are the second lowest in the region while Oakville's are among the highest of these 23 cities. Regulatory costs and fees associated with residential development in Toronto are reported to be near the region's average.

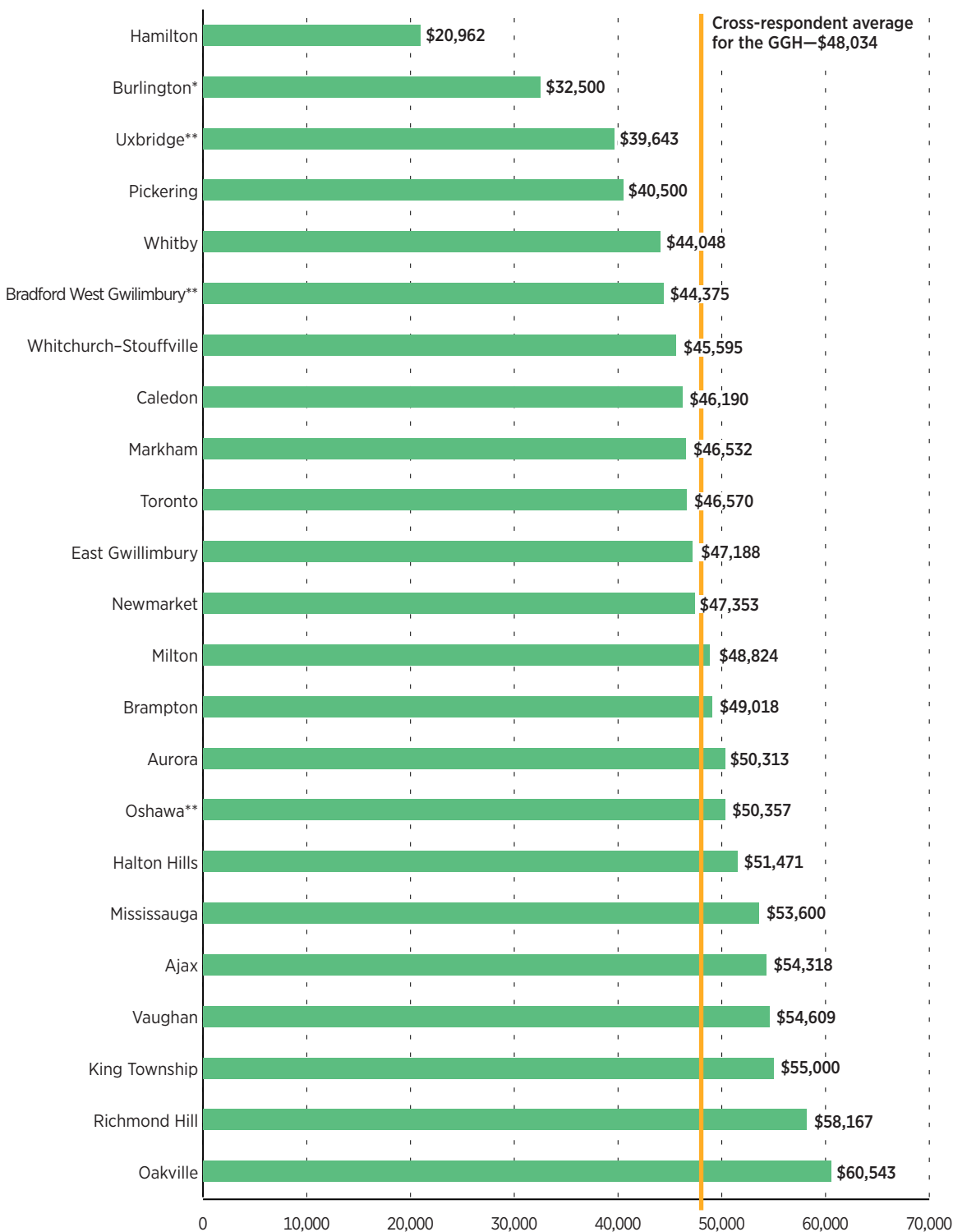
Servicing residential development can be subject to increasing returns to scale. Dense, inner-city development should generally be cheaper to service on a per-dwelling basis than homes built in new neighbourhoods (see Slack, 2002 for a discussion in the Canadian context). If regulatory costs broadly aim to represent the capital cost of servicing new neighbourhoods with new roads, sewers, and other infrastructure, they should be lowest in cities that are intensifying—growing by making existing communities denser rather than creating new ones on greenfield land. However, Green, Herzog, and Filipowicz (2015b) show that trends in regulatory costs across Canada are the opposite of what one would expect if the CFI measures reasonable servicing costs. Instead, the data suggest that intensifying cities often have regulatory frameworks that are costly to navigate.

### 3.4 Rezoning

The need to change zoning bylaws can affect approval timelines and regulatory costs. Zoning bylaws “[state] exactly: how land may be used; where buildings and other structures can be located; the types of buildings that are permitted and how they may be used; [and] the lot sizes and dimensions, parking requirements, building

<sup>10</sup>. Costs and fees in dollars per dwelling unit built were assigned to bins as follows: Less than \$1,000 per unit is taken as \$500; \$1,000 to \$9,999 per unit as \$5,000; \$10,000 to \$19,999 per unit as \$15,000; \$20,000 to \$34,999 per unit as \$27,500; \$35,000 to \$49,999 per unit as \$42,500; \$50,000 to \$75,000 per unit as \$62,500; and more than \$75,000 per unit as \$82,500.

**Figure 7: The Cost and Fees Index (2016) for Ontario’s Greater Golden Horseshoe—typical regulatory cost, \$ per dwelling unit**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

heights and setbacks from the street” (Ontario, Ministry of Municipal Affairs and Housing, 2010). It is difficult to measure the impact of zoning on the housing supply: we cannot observe how a city would grow without its current regulation. The prevalence of rezoning (the process of amending the zoning designation assigned to a given parcel) is our most objective measure of zoning’s impact on development.<sup>11</sup>

Our survey asked respondents whether they rezone property. Those who do were asked to estimate how frequently their multiple-dwelling and single-family projects require rezoning in each city by selecting one of five bins: Never; Rarely (about 25% of projects); Sometimes (about half of projects); Frequently (about 75% of projects); and Always. The Rezoning Index is the average percentage of respondents’ projects estimated to require rezoning in each city.<sup>12</sup> It is reported in **figure 8** and broken down by development type where possible in **Appendix 3**.

Our survey suggests that only 40% of projects in Scugog Township require rezoning. Conversely, almost all reported projects in Niagara Falls, Thorold, and Port Hope require this approval, although data for these cities are drawn from fewer respondents. A more meaningful result is found in Pickering, where a much larger number of respondents consistently report a high frequency of rezoning.<sup>13</sup> In the GGH, the average reported proportion of new development requiring rezoning is 62%, far above the average of 46% in the rest of Canada.<sup>14</sup>

Survey respondents who describe approval timelines both with and without rezoning allow us to estimate the average effect of the rezoning process on approval timelines. We do this by calculating the differences in these timelines for each respondent in each city, then averaging across responses.<sup>15</sup> Data from across

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11. Conceptually, the prevalence of rezoning measures how compatible land-use regulation is with demand by counting the proportion of building done by survey respondents that requires amendment to existing zoning regulation. This measure does not capture zoning’s ability to prevent externalities; it indicates the amount of land with zoning regulation that developers and city representatives have agreed to change.

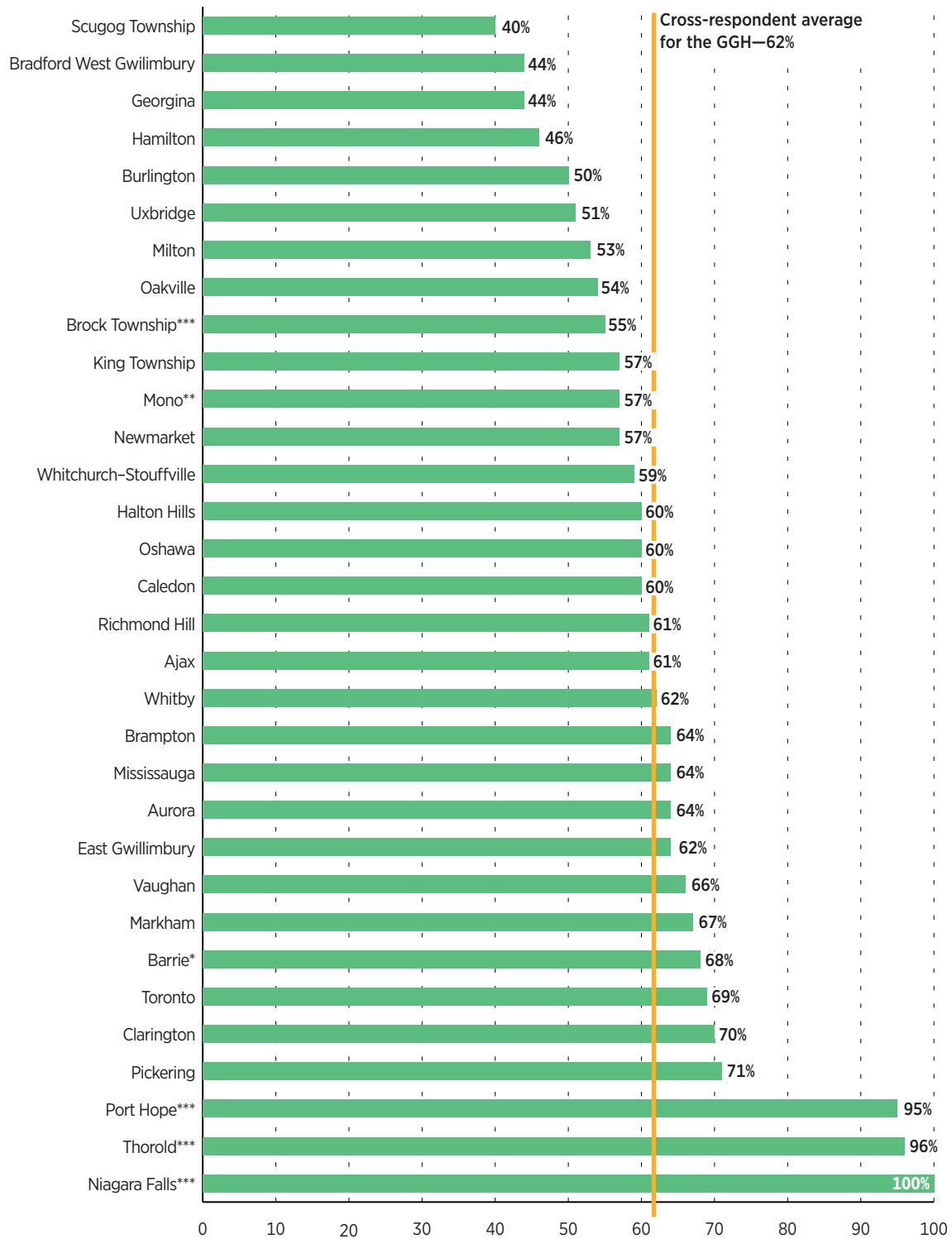
12. To compute the rezoning index, survey responses were coded as follows: never or indicated that respondent does not rezone land is taken as 0; rarely (about 25% of projects) is taken as 25%; sometimes (about half of projects) as 50%; frequently (about 75% of projects) as 75%; and always as 100%.

13. When interpreting these results, it is important to remember the number of respondents these data are drawn from, and that this subset of respondents in any given city may exclusively rezone property.

14. The national cross-respondent average of the rezoning index is 55% when the GGH is included.

15. Differences between timelines with and without rezoning are calculated for every survey respondent in each city, separately for single-family and multiple-dwelling developments. Data from surveys without a response for either rezoning or non-rezoning timelines for a particular dwelling type and city are dropped. This statistic is only reported in cities where at least three respondents describe timelines with and without rezoning for either dwelling type.

**Figure 8: The Rezoning Index (2016) for Ontario’s Greater Golden Horseshoe—percentage of residential development requiring rezoning**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

Canada suggest that, for the average developer outside of the GGH, rezoning adds 4.0 months to a typical project's approval timeline.<sup>16</sup> In the GGH, this average rises to 4.3 months, increasing the incentive to avoid rezoning.

**Figure 9** presents the estimated effect of each city's rezoning process on the time needed to approve standard residential developments. In the neighbouring cities of Hamilton and Burlington, rezoning is reported to add over 8 months to the approval process. This effect is arguably more important in Toronto, however, where over two thirds of development requires rezoning, a procedure that extends typical development projects by 7 months. Peel Region's three municipalities (Mississauga, Brampton, and Caledon) share three of the top five rankings on this index, with rezoning adding between one and 4 months to the approval process.

### 3.5 Council and community

We asked developers how local council and community groups affect single-family and multiple-dwelling development. Responses are measured on a 5-point scale: [1] encourages development; [2] not a deterrent to development; [3] mild deterrent to development; [4] Strong deterrent to development; and [5] would not pursue development due to this factor. The Council and Community Index (CCI) is the average response to these questions for each city (**figure 10**).

Council and community opposition does not seem to concentrate in any specific sub-region, in contrast to British Columbia's Lower Mainland where it is reported to be strongest in the region's North Shore (Green, Herzog, and Filipowicz, 2015b). The strongest opposition is reported in King Township, while the least is in Oshawa. In general, our survey suggests that council and community opposition presents a deterrent to development in only a handful of GGH cities. On the other hand, on average, no city shows a tendency to encourage development.

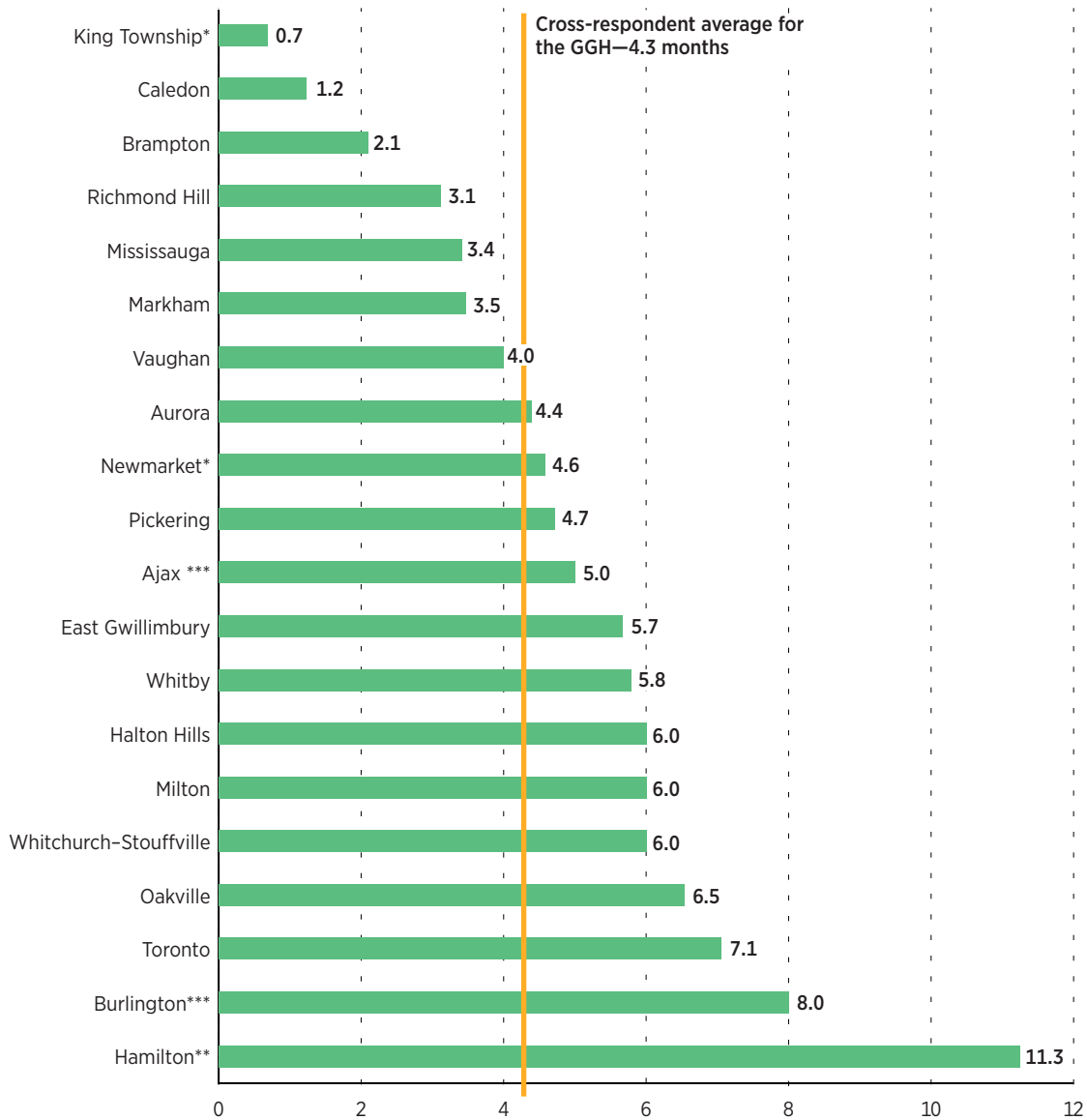
Some suggest that incumbent homeowners have an incentive to block new development, restricting the housing supply and increasing the market value of their property. Hilber and Robert-Nicoud (2013) formalize this argument, predicting that owners of developed land will favour stringent land-use regulation. Turning to data gathered from American metropolitan areas, the authors find a positive relationship between the share of developed land in 1992 and a measure of regulation in 2005; this evidence for their theory is supported by several statistical techniques.<sup>17</sup> To the extent that this effect also occurs in Canada, it can be measured by the CCI.

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<sup>16</sup>. The national average effect of rezoning on approval timelines is 4.11 months when the GGH is included.

<sup>17</sup>. Hilber and Robert-Nicoud (2013) estimate the effect of historical share of developed land and homeownership rate on current measures of regulation by two stage least squares, using coastal access and the percentage of households with married couples and no children

**Figure 9: The effect of the rezoning process on approval timelines in Ontario’s Greater Golden Horseshoe (2016)—city-level averages in months**

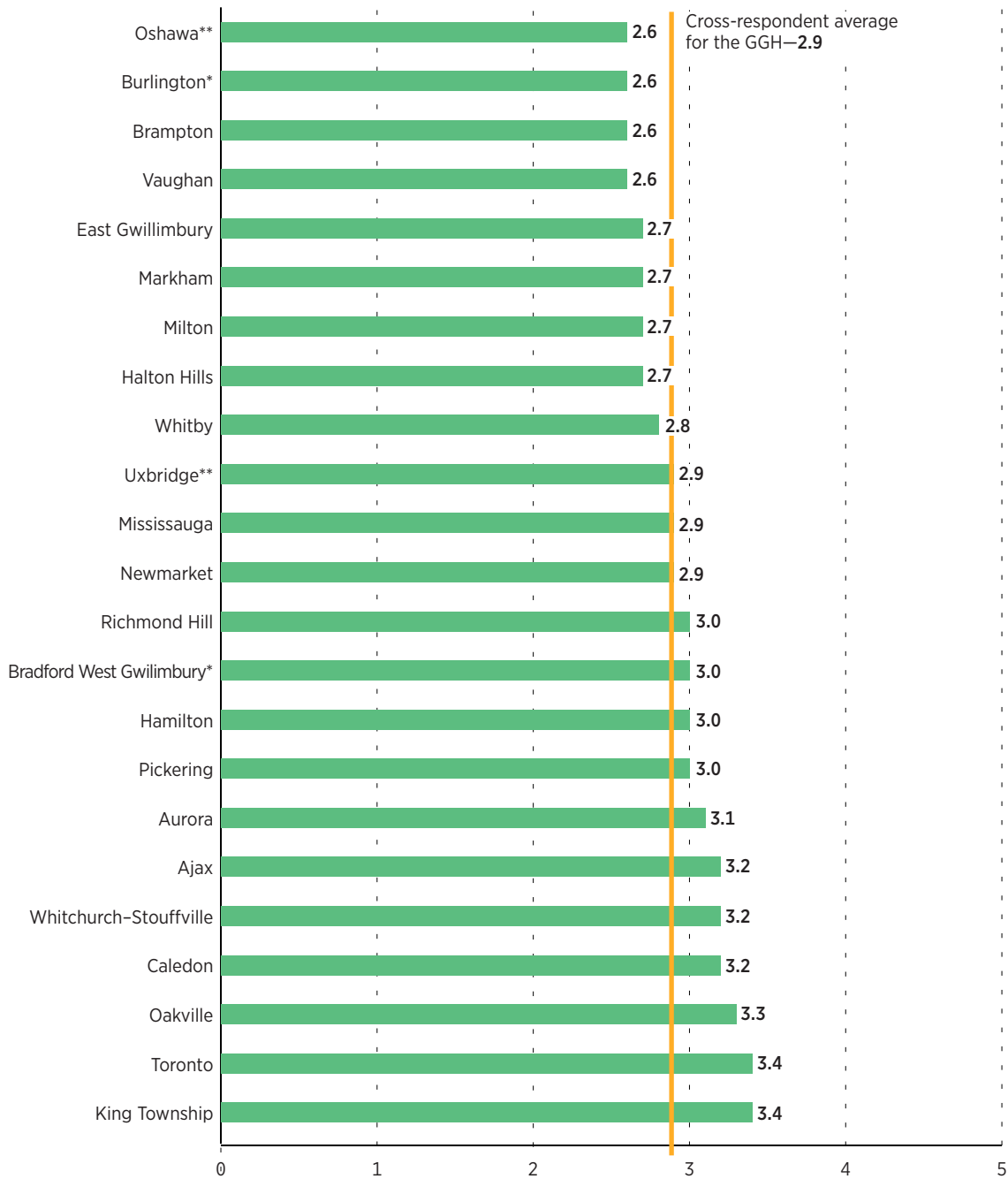


Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors’ calculations.

as instruments. In addition to a strong effect of developed land on regulation, Hilber and Robert-Nicoud (2013) find mixed evidence that past homeownership rates have led to more intense land-use regulation in the United States. The authors also control for household wages, population density, the Democratic Party’s vote share, and regional effects.

**Figure 10: The Council and Community Index (2016) for Ontario's Greater Golden Horseshoe**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

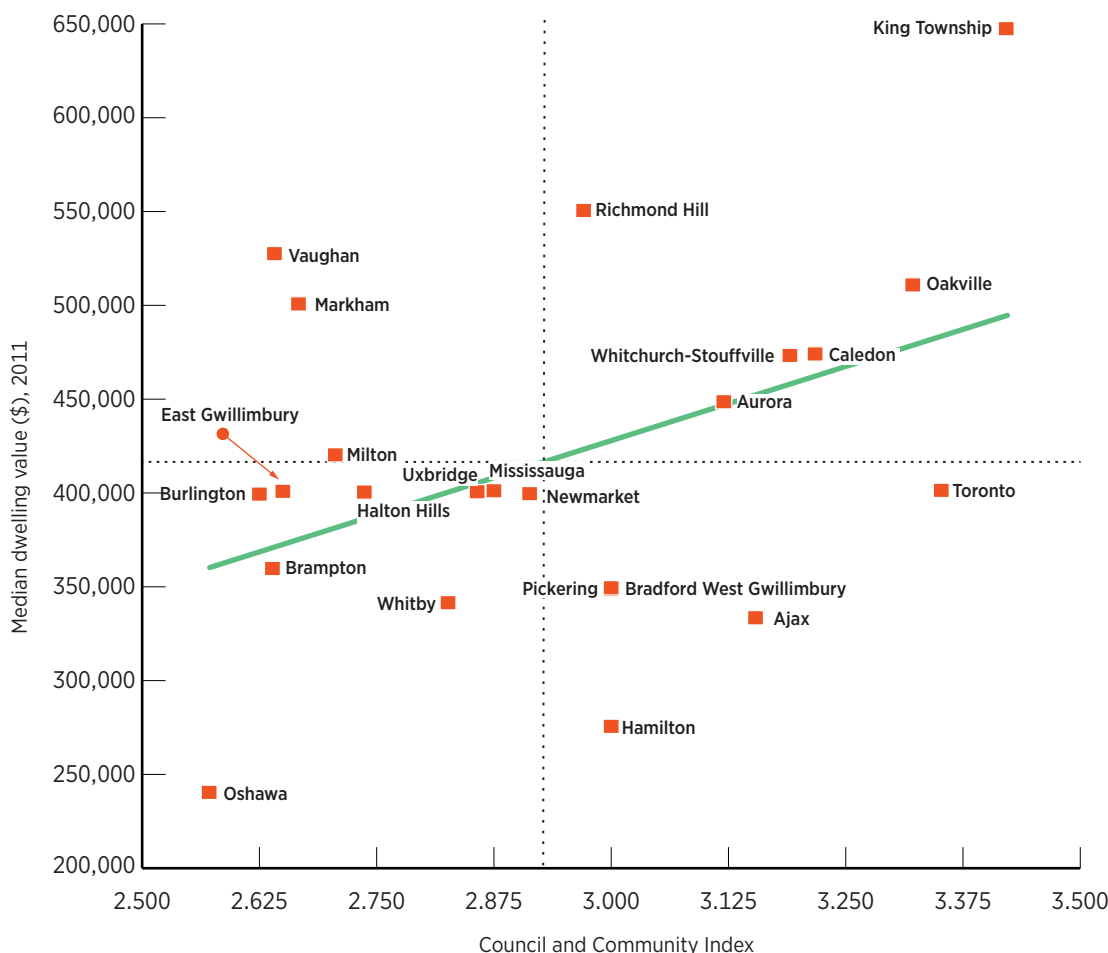
Scale: [1] Encourages development; [2] Not a deterrent to development; [3] Mild deterrent to development; [4] Strong deterrent to development; and, [5] Would not pursue development due to this factor.

Sources: Fraser Institute Survey of Land-Use Regulation 2014, 2016; authors' calculations.



**Figure 11** shows that the CCI is positively correlated with dwelling values reported to the 2011 National Household Survey (with a correlation coefficient of 0.377).<sup>18</sup> While this relationship is not necessarily causal—other factors such as neighbourhood attractiveness may be driving both the CCI and dwelling values—it is difficult to rule out the hypothesis that homeowners may deter residential development to increase their property values.

**Figure 11: Council and Community Index (2016) and median 2011 dwelling values (\$) in Ontario’s Greater Golden Horseshoe**



Notes **1.** The correlation coefficient between the CCI and city-level median dwelling values is 0.377 and the trend line is fit by ordinary least squares. **2.** The vertical and horizontal dotted lines indicate the mean values of each axis.

Sources: Statistics Canada 2013a; Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

**18.** The OLS regression line shown has a slope indicating a \$133,510 increase in dwelling values ratings for a one-point increase in the CCI. Assuming homoscedasticity—which is not rejected by a Breusch-Pagan (1979) test (P-value = 0.64)—the 95% confidence interval (CI) for this slope runs from -\$15,532 to \$282,553.

Within cities, the effect of opposition captured by the CCI tends to be stronger against multiple-dwelling development. This tendency is presented in the 2015 edition of this report (Green, Herzog, and Filipowicz, 2015b).

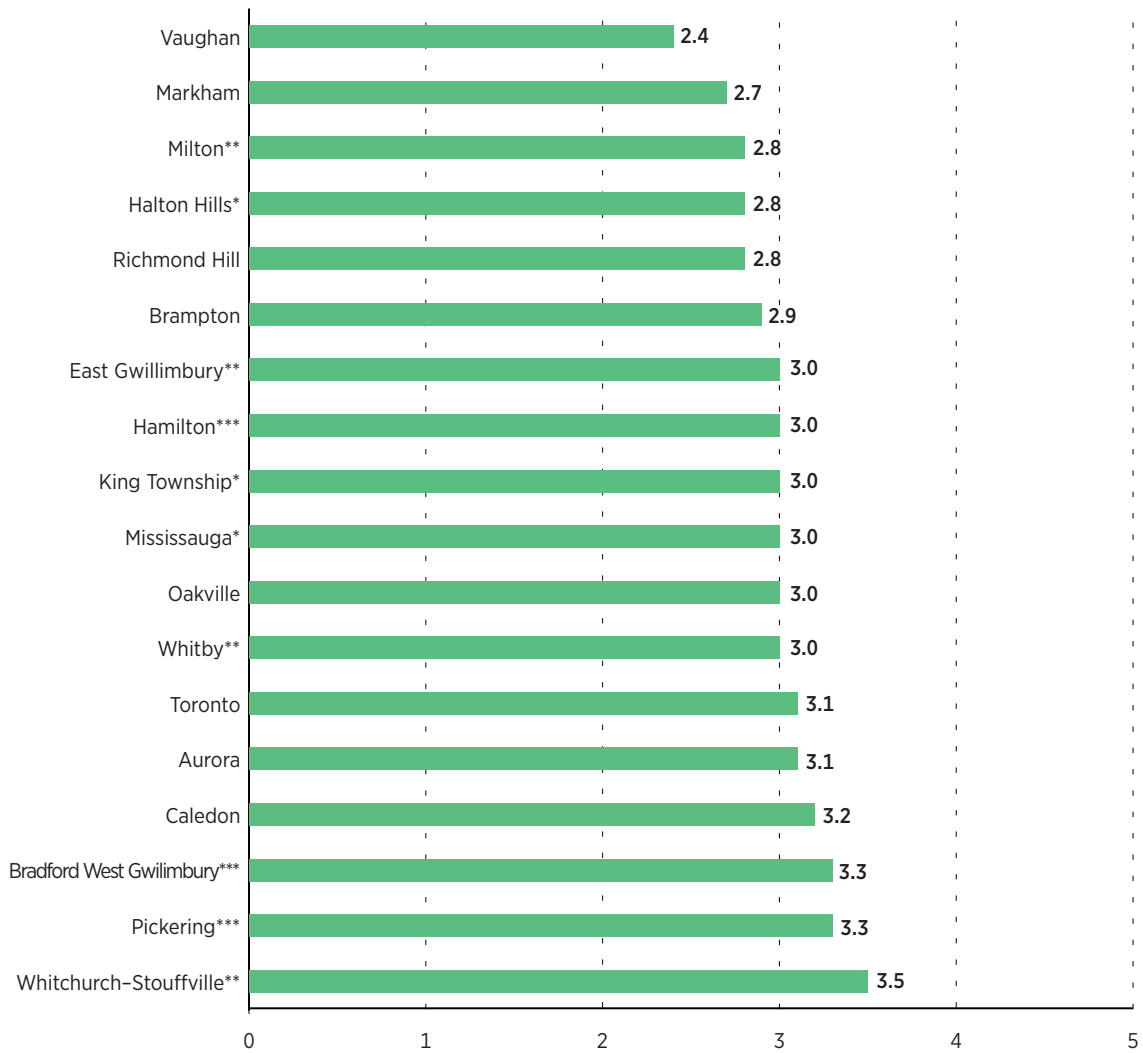
### 3.6 Predictability of possible land uses

The effects of uncertainty, as measured by the TUI and CCI, tend to slow the supply of new housing in highly desirable neighbourhoods (Green, Filipowicz, Lafleur, and Herzog, 2016). In addition to these indices' measures of uncertainty, we introduced a question asking 2016 respondents how uncertainty in the end uses of land allowed by the regulator, prior to applying for rezoning or building permits, affects development. For example, having a better idea of the possibility to build a residential community in a municipality may influence the likelihood of its construction. This question's results are not included in the composite index.

As in the CCI and TUI, responses to this question are measured on a 5-point scale: [1] encourages development; [2] not a deterrent to development; [3] mild deterrent to development; [4] strong deterrent to development; and [5] would not pursue development due to this factor. The Land-Use Possibilities Index (LPI) is the average response to these questions for each city ([figure 12](#)).

The strongest deterrent to development due to less predictable land-use possibilities is reported in Whitchurch-Stouffville, while this effect is least present in neighbouring Vaughan and Markham. The LPI detects a mild deterrent to development in most cities in the Greater Golden Horseshoe.

**Figure 12: The Land-Use Possibilities Index (2016) for Ontario's Greater Golden Horseshoe**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

## 4 An Index of Residential Land-Use Regulation

In presenting results of the Survey of Residential Land-Use Regulation, we have described many important pathways through which regulation affects the housing market in the Great Golden Horseshoe. It is useful to have a single measure of land-use regulation, summarizing all of these dimensions. In this section we construct and present an Index of Residential Land-Use Regulation for the GGH as a summary statistic of regulation. We use a common standardization technique to produce our index, which ranks cities by their relative performance on each dimension of regulation. [Appendix 1](#) describes this process in detail.

We compute the index of regulation for the 23 GGH cities with at least three survey responses behind each of its five components.<sup>19</sup> Thus, our ranking of cities is dependent on the availability of high-quality data for each city. Some cities come in below our quality standard for only one of the index's components, but are nonetheless omitted.

### 4.1 Results

Condensing our survey-based measures of regulation into a single index has the advantage of creating a data-driven method to rank cities from least to most regulated. The Index of Residential Land-Use Regulation is negative in cities that are less regulated than average and positive in the GGH's most regulated cities. It is presented alongside its component measures of regulation in [table 2](#).

Of the GGH cities ranked, Burlington tops the Index of Residential Land-Use Regulation. This is driven by good ratings on timeline length, regulatory costs, and rezoning, and despite a moderately negative impact from timeline uncertainty and council and community. Oakville—Burlington's neighbour—stands in contrast to Burlington's relatively efficient and low-cost regulations, ranking worse on all indicators. King Township ranked the lowest, as it scored poorly on all measures except for the prevalence of rezoning.

Toronto's shorter-than-average timelines are offset by its relatively high timeline uncertainty, and the impact of opposition. While their relative performance on individual indicators varies, Toronto's aggregate ranking is below all of its neighbouring municipalites, which include Pickering, Markham, Vaughan, Brampton, and Mississauga.

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<sup>19</sup>. These exclude the Land Use Possibilities Index as it was only introduced in 2016.

**Table 2: Index of Residential Land-Use Regulation**

	Approval Timelines	Council and Community	Cost and Fees	Rezoning Prevalence	Timeline Uncertainty	Aggregate Index
1. Burlington	14.4	2.6	\$32,500.00	50%	2.8	-2.71
2. Hamilton	17.5	3.0	\$20,961.54	46%	3.3	-1.25
3. Milton	17.2	2.7	\$48,823.53	53%	2.8	-1.03
4. Brampton	17.0	2.6	\$49,017.86	64%	2.7	-0.90
5. Uxbridge	20.3	2.9	\$39,642.86	51%	2.6	-0.87
6. Whitby	16.7	2.8	\$44,047.62	62%	2.9	-0.68
7. East Gwillimbury	19.3	2.7	\$47,187.50	64%	2.7	-0.30
8. Markham	18.4	2.7	\$46,532.26	67%	2.8	-0.27
9. Vaughan	18.7	2.6	\$54,609.38	66%	2.6	-0.27
10. Newmarket	18.5	2.9	\$47,352.94	57%	2.8	-0.23
11. Halton Hills	17.6	2.7	\$51,470.59	60%	3.0	-0.08
12. Oshawa	19.0	2.6	\$50,357.14	60%	3.0	-0.05
13. Bradford-West Gwillimbury	20.1	3.0	\$44,375.00	44%	3.1	0.03
14. Mississauga	17.9	2.9	\$53,600.00	64%	2.8	0.13
15. Pickering	18.6	3.0	\$40,500.00	71%	2.8	0.24
16. Whitchurch-Stouffville	18.8	3.2	\$45,595.24	59%	3.0	0.45
17. Caledon	18.2	3.2	\$46,190.48	60%	3.0	0.54
18. Richmond Hill	18.4	3.0	\$58,166.67	61%	3.0	0.72
19. Aurora	19.8	3.1	\$50,312.50	64%	3.0	1.11
20. Toronto	17.7	3.4	\$46,569.77	69%	3.2	1.24
21. Oakville	17.8	3.3	\$60,543.48	54%	3.3	1.25
22. Ajax	19.7	3.2	\$54,318.18	61%	3.1	1.38
23. King Township	19.9	3.4	\$55,000.00	57%	3.1	1.55
Cross-city average	18.5	2.9	\$47,290	62%	3.0	
Cross-respondent average	18.2	2.9	\$48,034	62%	2.9	

Note: The Index of Residential Land-Use Regulation is the standardized sum of its components, rescaled to have a standard deviation of one. It can be read as a Z-score.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

## 5 Professionals' Concerns and Policy Recommendations

The survey produced comments from twelve respondents in the Great Golden Horseshoe. The issues raised include the difficulties faced while navigating the application process and the stringency of regulation from multiple levels of government. These comments identify specific concerns surrounding land-use regulation in the GGH.

The most frequent theme to arise in survey respondents' comments is the regulatory stringency surrounding the development application process. Land-use regulations and intensification targets originating at the municipal and provincial levels are described as costly, preventing broader choice to consumers, and forcing smaller builders out of the marketplace.

Respondents argue that development procedures are not properly streamlined, reporting the need for numerous reviews and permissions from various parties, including conservation authorities at the local and provincial level. These "soft" requirements have multiplied in recent years, and can, in certain cases, represent up to half of the cost of development, excluding interest payments. Some claim that the presence of upper-level municipalities (regional municipalities or counties) adds to this difficulty.

Ontario's Greenbelt—7,200 km<sup>2</sup> of protected rural lands surrounding the Greater Toronto Area—is mentioned by respondents as a source of concern for the future affordability of housing. However, Burlington, a city partially covered by the Greenbelt, is mentioned for its ability to accommodate infill development compensating for its limited ability to grow outwards.

Additional comments point out the propensity for council, planning staff, and community groups to be at odds, and that regulation's role in the decision to pursue residential development is generally overshadowed by market forces.

## 6 Conclusion

Our data show strong variability in how homebuilders and developers experience regulation across cities in Ontario's Greater Golden Horseshoe. We find that reported approval timelines, and how they are affected by the rezoning process, vary significantly across cities. Equally strong variation is reported for regulatory costs and fees associated with the development process: large differences between neighbouring municipalities like Oakville and Burlington occur. Council and community opposition to residential development is perceived as strongest in cities where dwelling values are highest, raising questions about the causes and consequences of local resistance to new housing.

Further work will analyse the results of the Survey of Residential Land-Use Regulation in major cities across Canada. The information produced will enable the systematic comparison of land-use regulation across municipalities, and can be used to understand regulation's consequences for housing markets and regional economies.<sup>20</sup> It can play a role in identifying situations where regulation constitutes a burden on the housing market, and those where regulations are cost-effective and efficient. Continued measurement will help us understand the role of public policy in Canada's urban landscape.

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<sup>20</sup>. Data from last year's three publications in the New Homes and Red Tape series (Green, Herzog, and Filipowicz, 2015a, 2015b, 2015c) was at the heart of *The Impact of Land-Use Regulation on Housing Supply in Canada* (Green, Filipowicz, Lafleur, and Herzog, 2016), which compared regulation data with dwelling stock growth between 2006 and 2011. <check]

## Appendix 1. Constructing the Index

The first step in constructing the Index of Residential Land-Use Regulation is to carefully select its components. If any two components of the index are perfectly correlated, they may measure the same effect: adding them both would essentially be double counting. **Table A.1** presents correlations between the five main, and single omitted,<sup>17</sup> measures of regulation discussed in section 3.

The measures of regulation we derived from our survey are generally positively related across the cities for which we compute an index of regulation. As noted at the end of section 3.6 (p. 20), responses to a question about planning objectives are highly correlated with the council and community index. We do not use our measure of the effect of planning objectives when constructing an aggregate index. The rezoning index appears to be unique, positively correlated with our measures of approval timelines and regulatory costs while exhibiting a negative relationship with timeline uncertainty. While approval timelines and council and community opposition are both correlated with regulatory costs, the two measures lack a strong linear relationship with each other.

We use the standardized sum<sup>18</sup> of the Average Approval Timelines, Cost and Fees, Rezoning, Council and Community, and Timeline Uncertainty Indices as our Index of Residential Land-Use Regulation. For each city, this index captures the frequency and severity of deviations from average levels of each of its components in the GGH. This index is centered around zero, positive for cities that score worse than average on many components of regulation, and negative for cities that score better than average.

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**17.** See the conclusion of section 3.4 and the discussion below of the omitted measure of regulation.

**18.** We standardize each component of our index by subtracting its mean (calculated using cities included in the overall index) and dividing by its standard deviation (calculated using the same cities). Each city is assigned an index value by summing across the standardized components.



**Table A.1: Correlations between measures of regulation for Ontario's Greater Golden Horseshoe (GGH)**

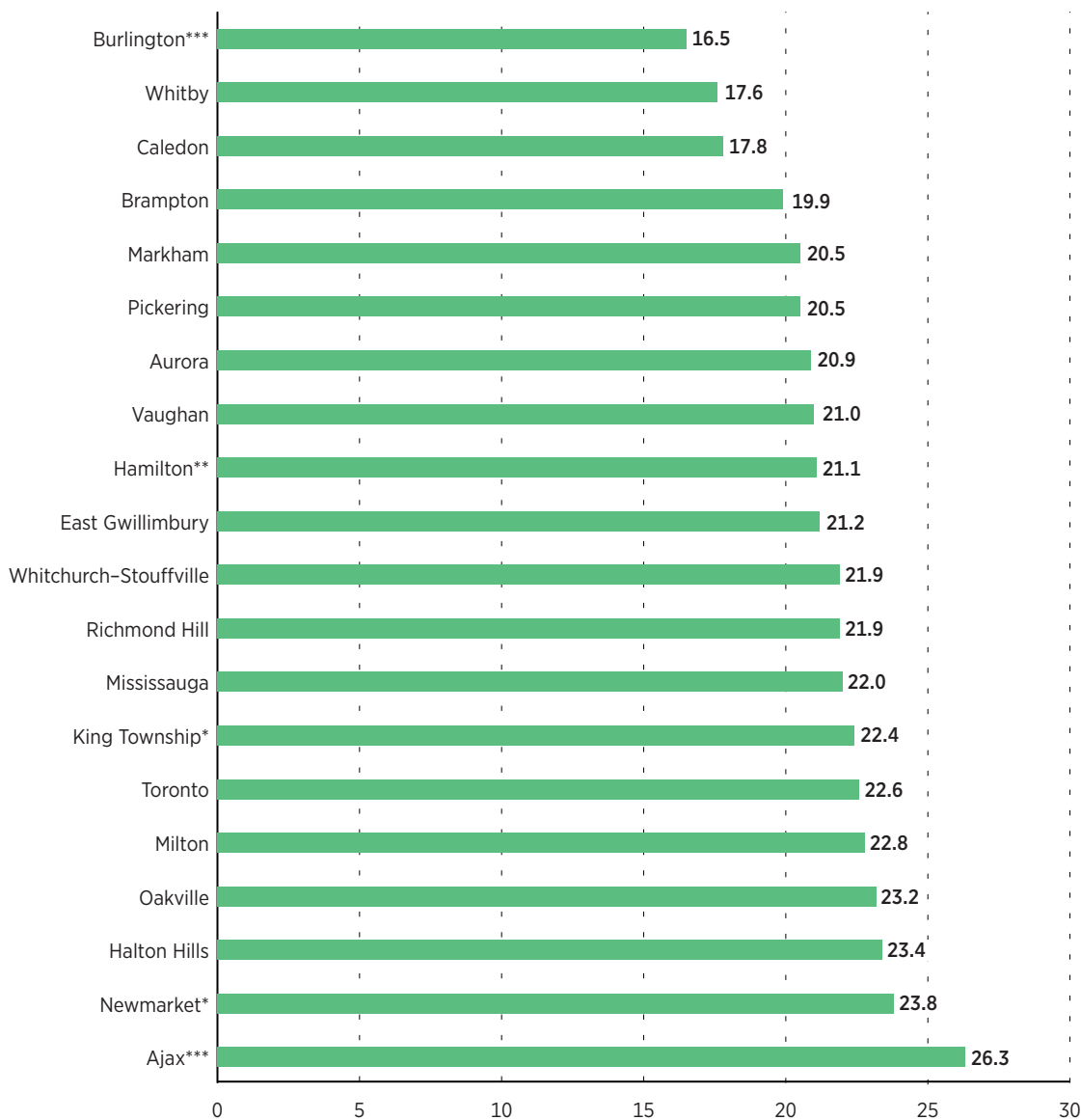
	Approval Timelines	Cost and Fees	Council and Community	Timeline Uncertainty	Planning Objectives	Rezoning Index
Approval Timelines	<b>1</b>					
Costs and Fees	0.33	<b>1</b>				
Council and Community	0.04	0.23	<b>1</b>			
Timeline Uncertainty	0.06	-0.08	<b>0.56</b>	<b>1</b>		
Planning Objectives	0.04	0.23	<b>1</b>	<b>0.56</b>	<b>1</b>	
Rezoning Index	0.20	0.14	0	-0.23	0	<b>1</b>

Note: This table presents pearson correlation coefficients computed across cities of the GGH.

Sources: Fraser Institute Survey of Land-Use Regulation; authors' calculations.

## Appendix 2. Approval Timelines by Rezoning and Housing Type

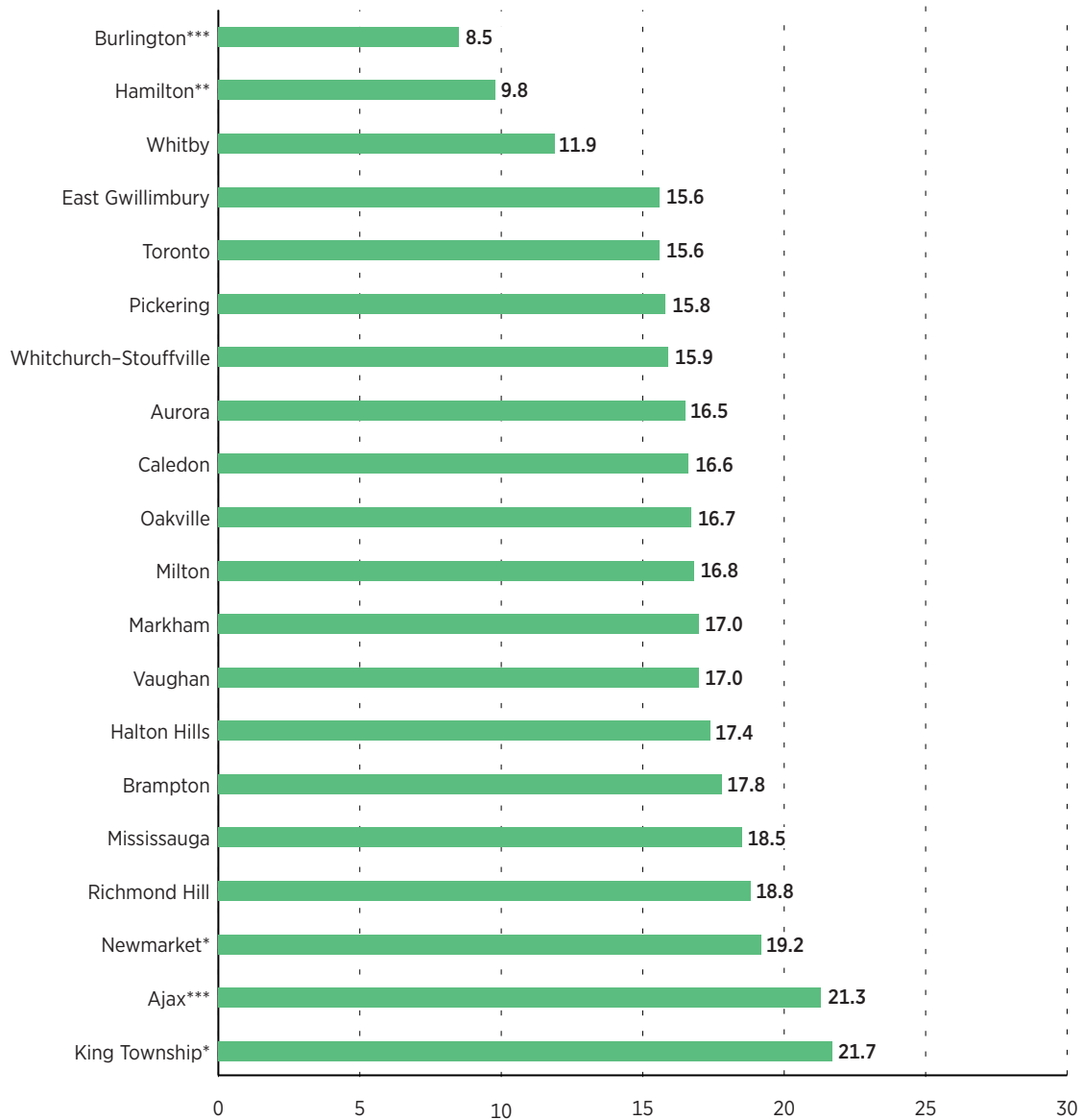
**Figure A2.1: Average approval timelines (months) for development in Ontario’s Greater Golden Horseshoe requiring rezoning, 2016**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

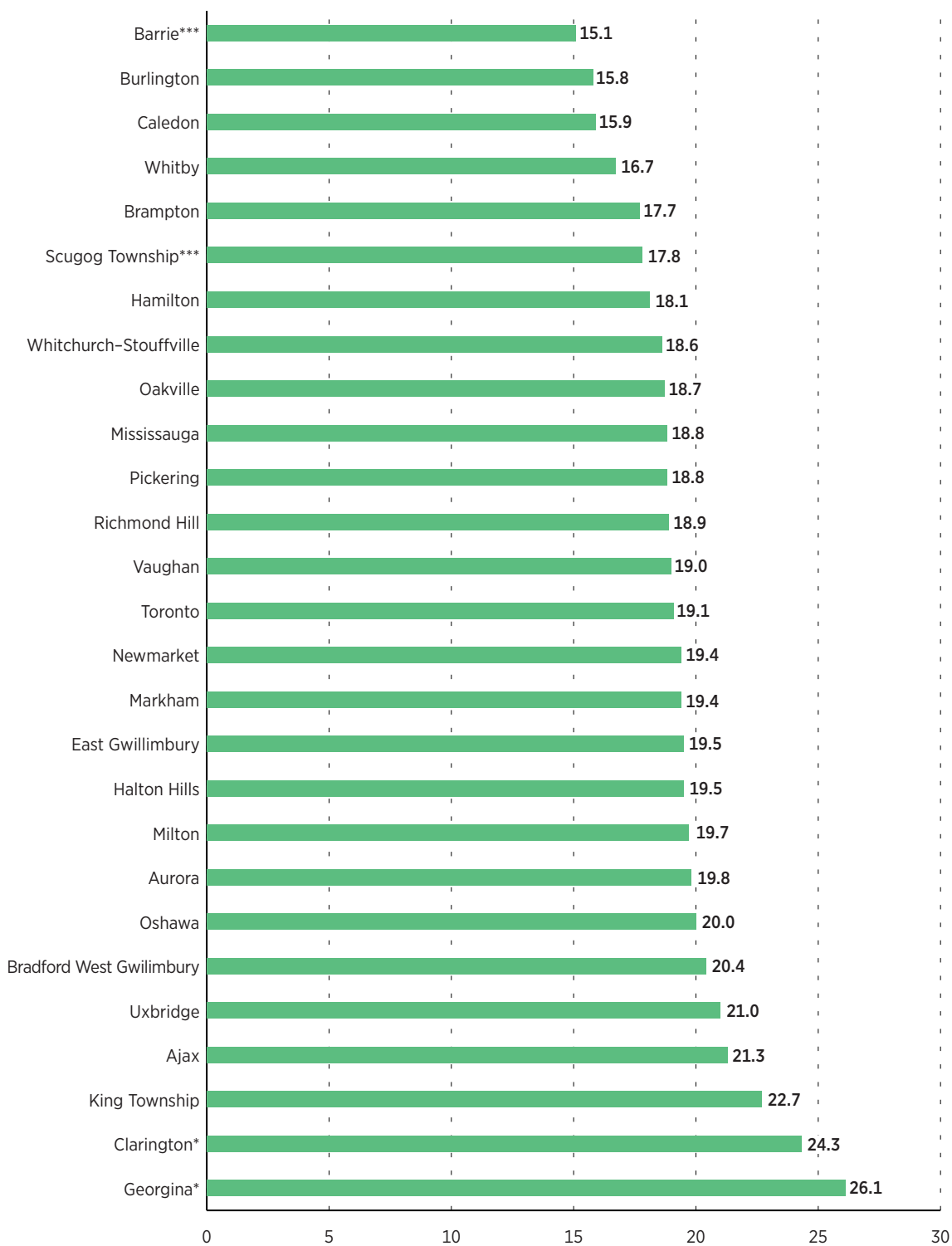
**Figure A2.2: Average approval timelines (months) for development in Ontario’s Greater Golden Horseshoe not requiring rezoning, 2016**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

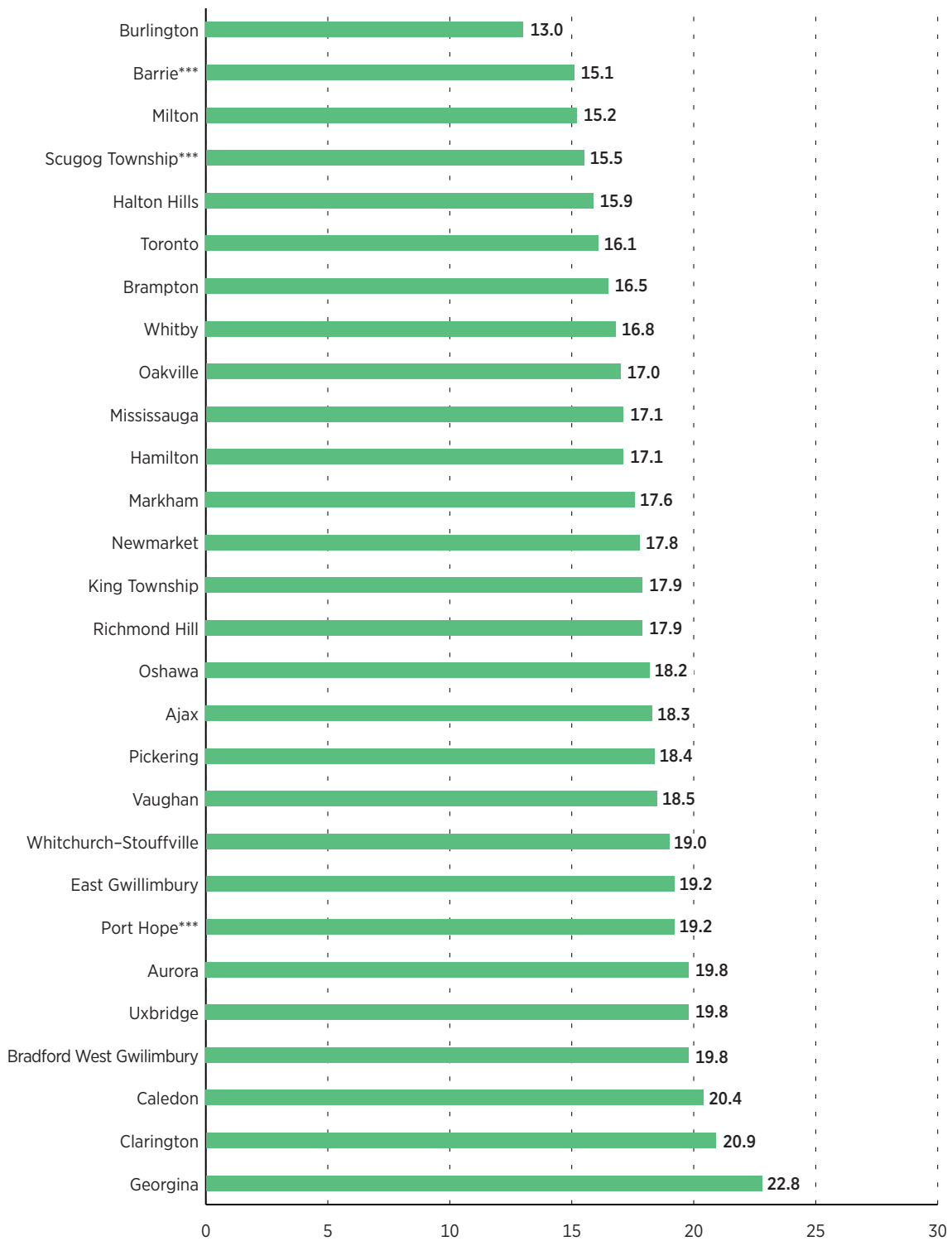
**Figure A2.3: Average approval timelines (months) for multiple-dwelling development in Ontario's Greater Golden Horseshoe, 2016**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

**Figure A2.4: Average approval timelines (months) for single-family development in Ontario's Greater Golden Horseshoe, 2016**

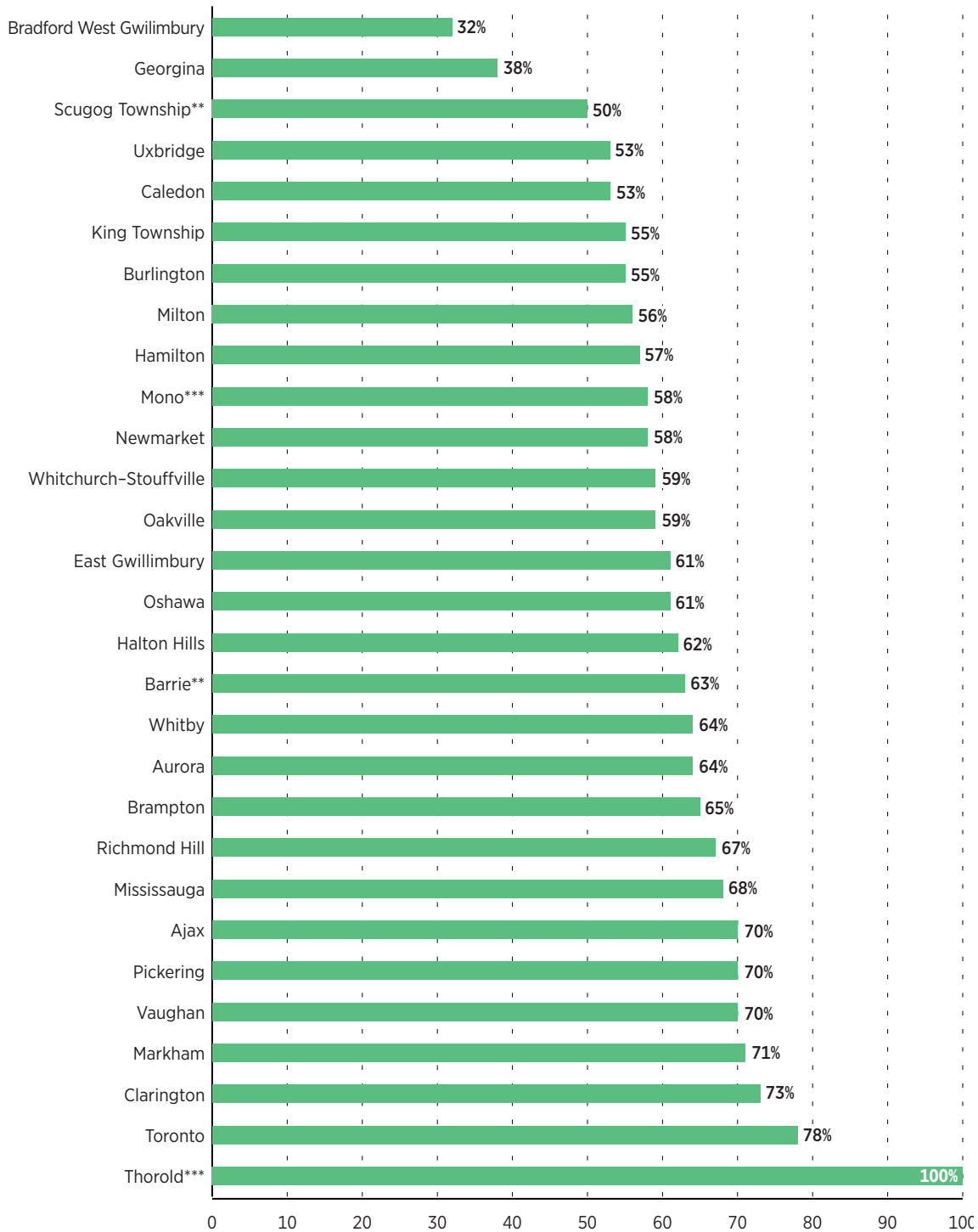


Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

## Appendix 3. Rezoning by Housing Type

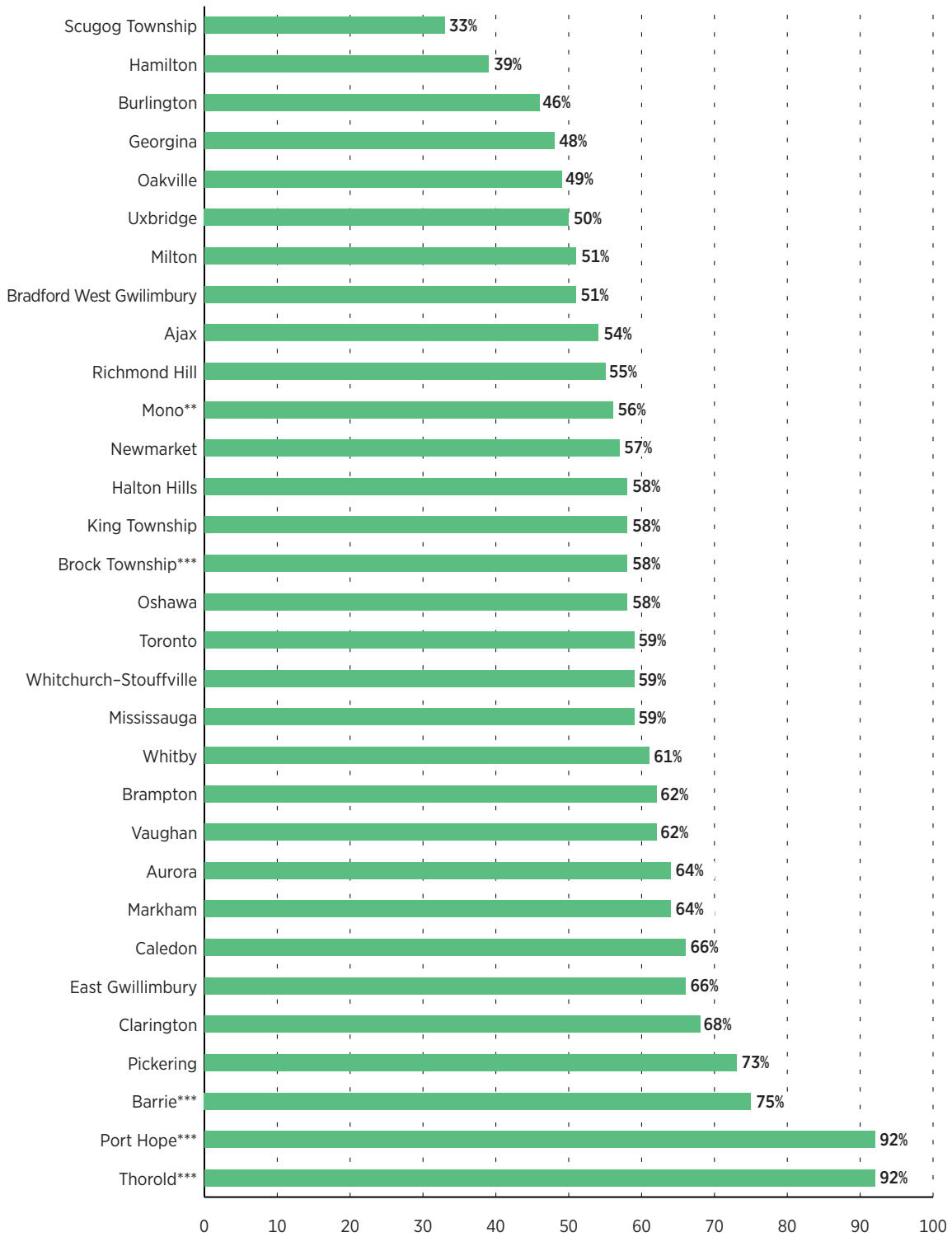
**Figure A3.1: The Rezoning Index (%) for multiple-dwelling development in Ontario's Greater Golden Horseshoe, 2016**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation, 2014, 2016; authors' calculations.

**Figure A3.2: The Rezoning Index (%) for single-family development in Ontario's Greater Golden Horseshoe, 2016**



Note: \*\*\* = 3 responses; \*\* = 4 responses; \* = 5 responses.

Sources: Fraser Institute Survey of Land-Use Regulation 2014, 2016; authors' calculations.

## Appendix 4. Survey Questions

*Note: questions 6, 7, 8, 9, 10, and 11 are replicated for MULTIPLE DWELLING developments.*

- 1 Please go through the following regions and select those with cities that you are FAMILIAR with (in terms of residential development). Please select AS MANY AS POSSIBLE.

*Respondents were presented with 19 regions to choose from.*

- 2 What type of work does your organization do? (Check all that apply)

*The options include land development, new home building, legal services, engineering, architecture and design, and other.*

- 3 What TYPES of development projects has your organization worked on in the past 10 years? (Check all that apply)

*The options include "Single-Family" and "Multiple Dwelling", both of which were described in more detail.*

- 4 Please go through the following cities and select those that you are FAMILIAR with. Please select AS MANY AS POSSIBLE.

*Respondents were presented with all cities available within the region(s) selected.*

- 5 Does your organization rezone property?

*Yes/no answer.*

- 6 Approximately how often do your SINGLE-FAMILY developments REQUIRE REZONING in each city?

*Respondents select from a 5-bin range from "Never" to "Always".*

- 7 Approximately how much TIME do you expect to spend getting PROJECT APPROVAL for standard SINGLE-FAMILY projects that REQUIRE REZONING in each city? From the filing date of the first stage of the approval process to the day you would be allowed to begin construction.

*Respondents select from a 7-bin range from "2 months or less" to "24 months or more", with the option of manually inputting a longer timeline.*

- 8 Approximately how much TIME do you expect to spend getting PROJECT APPROVAL for standard SINGLE-FAMILY projects that DO NOT REQUIRE



REZONING in each city? From the filing date of the first stage of the approval process to the day you would be allowed to begin construction.

*Respondents select from a 7-bin range from “2 months or less” to “24 months or more”, with the option of manually inputting a longer timeline.*

- 9** At the outset of your standard SINGLE-FAMILY projects, how does the amount of UNCERTAINTY in the TIME needed for the project APPROVAL PROCESS affect development in each city?

*Respondents select from a 5-bin range from “Encourages development” to “Would not pursue development due to this factor”.*

- 10** For your standard SINGLE-FAMILY projects, which of the following BEST APPROXIMATES the COST (per dwelling unit) of the PROJECT APPROVAL and REGULATORY COMPLIANCE process in each city? Please give a rough estimate that includes ALL ADMINISTRATION, PROCESSING, and DIRECT COMPLIANCE COSTS (permitting and review fees, community amenity contributions, development cost levies, inspection costs, relevant legal fees, etc.). There is no need to refer to a *pro forma* or other detailed records; a thoughtful estimate is sufficient.

*Respondents select from a 7-bin range from “Less than \$1,000 per unit” to “More than \$75,000 per unit”, with the option of manually inputting a higher per-unit cost.*

- 11** How do local COUNCIL and COMMUNITY groups affect your SINGLE-FAMILY development in each city?

*Respondents select from a 5-bin range from “Encourages development” to “Would not pursue development due to this factor”.*

- 12** Before applying for rezoning or building permits, how does UNCERTAINTY in the END USES OF LAND allowed by the regulator affect development in each city?

*Respondents select from a 5-bin range from “Encourages development” to “Would not pursue development due to this factor”.*

- 13** Are there any other comments or relevant information that you wish to add?

*An open comment box was provided to respondents.*

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## About the authors

### Kenneth P. Green

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