

THE COMPETITION TRIBUNAL

IN THE MATTER OF the *Competition Act*, R.S.C. 1985, c. C-34, as amended;

IN THE MATTER OF an application by the Commissioner of Competition pursuant to section 79 of the *Competition Act*;

AND IN THE MATTER OF certain rules, policies and agreements relating to the multiple listing service of the Toronto Real Estate Board.

BETWEEN:

COMPETITION TRIBUNAL TRIBUNAL DE LA CONCURRENCE FILED / PRODUIT CT-2011-003 August 31, 2012 Jos LaRose for / pour REGISTRAR / REGISTRAIRE	
OTTAWA, ONT	# 221

THE COMMISSIONER OF COMPETITION

Applicant

- and -

THE TORONTO REAL ESTATE BOARD

Respondent

- and -

**THE CANADIAN REAL ESTATE ASSOCIATION and
REALTYSELLERS REAL ESTATE INC.**

Intervenors

<p>Reply Expert Report of Gregory S. Vistnes, Ph.D. <i>August 23, 2012</i></p>
--

Contents

I. SUMMARY	1
A. MY JUNE REPORT	1
B. THE CURRENT REPORT	3
II. CLARIFICATION OF CERTAIN KEY ECONOMIC ISSUES.....	5
A. THE DISPUTE IS OVER HOW BROKERS PROVIDE INFORMATION, NOT WHAT INFORMATION THEY PROVIDE	5
B. THE INCREMENTAL BENEFIT OF VOWS DEPENDS ON THE CONDUCT AT ISSUE	9
C. TREB'S DOMINANCE AND EXERCISE OF MARKET POWER	10
1. <i>The market at issue concerns brokerage services, not confidential data</i>	10
2. <i>TREB has substantial market power (dominance) in the relevant markets</i>	11
3. <i>TREB can reduce competition despite not participating in the relevant market</i>	13
4. <i>TREB's conduct maintains prices above, and service levels and innovation below, competitive levels</i> ..	14
D. THERE IS NO CLEAN DIVIDING LINE DISTINGUISHING VOW-BASED BROKERAGE SERVICES	15
E. KEY QUESTIONS FOR ASSESSING TREB'S CONDUCT	16
III. DRS. CHURCH AND FLYER FAIL TO REBUT EVIDENCE THAT TREB'S PRE-2011 CONDUCT SUBSTANTIALLY REDUCED COMPETITION	17
A. DR. CHURCH IS LARGELY SILENT ABOUT TREB'S EARLY CONDUCT.....	18
B. DR. FLYER FAILS TO REBUT EVIDENCE THAT TREB'S CONDUCT REDUCED COMPETITION	19
1. <i>Alternative websites are not good substitutes</i>	19
a) IDXs do not provide comprehensive listings information	19
b) IDXs offer fewer services than VOWs	20
c) Brokers' IDX sites constitute a form of advertising, not competition.....	20
d) Realtor.ca is not an alternative to VOW-based broker competition.....	21
2. <i>Discount brokers do not reduce the importance of VOWs' commission reductions</i>	23
3. <i>VOWs can help brokers achieve lower costs for a variety of reasons</i>	24
4. <i>Alternative means of evaluating home values are often very inaccurate</i>	25
IV. DR. CHURCH FAILS TO REBUT EVIDENCE THAT TREB'S POST-2011 CONDUCT WITH RESPECT TO PENDING SALES OR WEST LISTINGS REDUCED COMPETITION	27
A. WEST LISTINGS AND PENDING SALES ARE NOT AVAILABLE OUTSIDE OF TREB'S MLS	27
B. WEST LISTINGS AND PENDING SALES PROVIDE VALUABLE INFORMATION	28
1. <i>Pending sales provide important up-to-date information</i>	28
2. <i>WEST listings and pending sales make up a substantial share of the available "comps"</i>	30
V. DR. CHURCH FAILS TO REBUT EVIDENCE THAT TREB'S POST-2011 CONDUCT WITH RESPECT TO SOLD LISTINGS SUBSTANTIALLY REDUCES COMPETITION.....	31
A. TREB CONTROLS THE RELEVANT MARKETS OF BUY- AND SELL-SIDE REAL ESTATE SERVICES.....	32
1. <i>The relevant markets in which TREB is dominant</i>	32
a) Real estate services providing MLS accessibility meet the requirements of a relevant market	33
b) Dr. Church appears to acknowledge that real estate services constitute a relevant market.....	34
c) Dr. Church fails to show that real estate service markets should be more broadly defined	35
d) TREB dominance does not depend on whether there is a market for "confidential data".....	36
B. BROKERS CANNOT MITIGATE TREB'S PROHIBITIONS BY ACQUIRING DATA ELSEWHERE	36
1. <i>Dr. Church's proposed alternatives are not close substitutes</i>	38
a) Teranet/GeoWarehouse	38
b) Municipal Property Assessment Corporation (MPAC).....	42
c) Brokerage data.....	43
d) FSBO websites	44
e) Appraisers and appraiser websites	45

2.	<i>Entry is unlikely to create good alternatives in the future.....</i>	45
C.	TREB’S PROHIBITIONS ON LETTING BROKERS USE VOWS TO DISTRIBUTE INFORMATION TO CUSTOMERS HARM BROKERS AS CONSUMERS VALUE THE ABILITY TO ACCESS INFORMATION FROM VOWS	46
1.	<i>Consumers care about how brokers provide information.....</i>	46
2.	<i>Limiting information to consumers creates substantial distortions.....</i>	48
D.	TREB’S RESTRICTIONS REDUCE COMPETITION REGARDLESS OF MARKET COMPETITIVENESS	50
1.	<i>Dr. Church overstates the degree of static competition in the GTA’s real estate brokerage markets</i>	50
a)	<i>Dr. Church incorrectly characterizes the market as perfectly competitive.....</i>	51
b)	<i>Dr. Church incorrectly assumes that agents are independent competitors</i>	52
2.	<i>Competitive markets do not prevent TREB’s conduct from reducing dynamic competition</i>	53
VI.	DR. CHURCH FAILS TO REBUT EVIDENCE THAT TREB’S POST-2011 CONDUCT WITH RESPECT TO BUYER COMMISSIONS SUBSTANTIALLY REDUCES COMPETITION	54
A.	DR. CHURCH ACKNOWLEDGES DISTORTIONS AND STEERING DUE TO ASYMMETRIC INFORMATION	55
B.	DR. CHURCH FAILS TO SHOW THAT STEERING DOES NOT CREATE COMPETITIVE DISTORTIONS.....	56
1.	<i>Buy-side commission rates and days-on-market</i>	57
2.	<i>Buy-side commission rates and probability of sale</i>	58
C.	DR. CHURCH FAILS TO PROVIDE OTHER EVIDENCE THAT VOWS ARE UNLIKELY TO REDUCE COMPETITIVE DISTORTIONS	59
VII.	DR. FLYER FAILS TO REBUT EVIDENCE THAT TREB’S POST-2011 CONDUCT SUBSTANTIALLY REDUCED COMPETITION	60
A.	DR. FLYER INCORRECTLY SUGGESTS THAT THE EXCLUDED DATA ARE NOT VALUABLE	60
B.	DR. FLYER INCORRECTLY SUGGESTS THE EXCLUDED DATA FIELDS CAN BE ACQUIRED ELSEWHERE	62
VIII.	THERE ARE NO PLAUSIBLE BUSINESS JUSTIFICATIONS	62
A.	FREE RIDING	62
B.	THE NEED TO PROTECT BROKER PROFITS	65
C.	PRESERVING THE MLS SYSTEM AND “LIQUIDITY”	65
D.	COSTS OF PROVIDING AND STOPPING UNAUTHORIZED ACCESS.....	69
E.	TREB’S NON-PROFIT STATUS	69

I. SUMMARY

1. Dr. Jeffrey Church's July 27, 2012 report ("Church Report") and Dr. Frederick Flyer's August 13, 2012 report ("Flyer Report") set forth their opinions, and the basis for their opinions, regarding the likely competitive effect of the Toronto Real Estate Board's (TREB's) conduct in the pre-2011 and the post-2011 periods.¹ Both Drs. Church and Flyer also discuss whether there are business justifications for TREB's conduct and why they believe the proposed remedy in this matter might cause competitive harm.²

2. Having carefully considered their reports and the evidence they offer in support of their arguments, it remains my opinion that the evidence shows that TREB's conduct has substantially reduced, and continues to substantially reduce, competition among real estate agents and brokers in the GTA and thereby has caused substantial harm to consumers in the GTA.³ This report sets forth the evidence supporting my opinions.⁴

A. *My June Report*

3. In my June 22, 2012 report ("Vistnes June Report"), I discussed how TREB's conduct at issue consists of its pre-2011 conduct in which it discriminated between brokers by preventing brokers in the GTA from using VOWs to show any MLS information to their consumers, and its post-2011 conduct in which TREB allowed brokers to show some MLS information on their VOWs, but continued its discrimination against brokers using VOWs to show their consumers information regarding TREB's "excluded data fields." In that report, I provided the evidence and bases for my opinions that these two classes of conduct substantially reduced competition and harmed consumers in the GTA.

4. As summarized in my June report, based on my review of the evidence, I reached the following principal opinions:

- TREB has substantial market power in, and control over, two relevant markets.

¹ The two time periods correspond to the point at which TREB changed its policy from effectively preventing competing brokers in the Greater Toronto Area (GTA) from offering virtual office websites (VOWs) to allowing brokers to offer VOWs that show a limited set of MLS information. Although TREB formally changed its policy in July 2011, it was not until later in the year that TREB began providing a VOW data feed that brokers could use.

² Dr. Flyer also offers his opinion that, even if TREB's conduct is found to have substantially reduced competition in the GTA, additional market-specific evidence should be considered before concluding that similar conduct in other areas of Canada is likely to reduce competition. I limit my opinion in this matter to competitive effects in the GTA.

³ As in my June report, throughout this report I use the terminology "reduces competition" as synonymous with "prevents or lessens competition" and I generally refer to "agents" and "brokers" interchangeably.

⁴ See Appendix 1 for a list of the materials that I rely upon for this report.

- The two relevant markets at issue in this matter are local buy-side and sell-side real estate services providing MLS accessibility.⁵
- TREB’s substantial market power flows from its control over the MLS, a joint venture that generates such significant efficiencies that agents and brokers depend on MLS access in order to effectively compete.
- By threatening to deny MLS access and the associated efficiencies to agents and brokers that violate TREB’s rules, TREB controls *how* firms compete, and *whether* those firms are allowed to compete, in the relevant markets.
- TREB has abused, and continues to abuse, its substantial market power and control of the relevant markets to reduce competition and protect its member brokers’ interests at the expense of consumers.
 - Prior to late-2011, TREB *excluded* VOW-based brokers and agents from competing in the relevant markets. TREB effected this exclusion by preventing agents and brokers from using VOWs to show MLS information, and threatening to cut off MLS access to any firm that showed that MLS information to consumers on their VOW.
 - Since late-2011, TREB *disadvantaged* VOW-based brokers by excluding competitively significant information from the data feed TREB made available to those VOWs and that those VOW-based brokers could show consumers.
 - Both before and after late-2011, TREB’s imposition of its own rules on how brokers can compete has distorted the competitive market and the manner in which dynamic competition evolves. By discriminating against brokers seeking to compete by offering innovative VOW-based services, TREB has discriminated against one class of competitors (VOW-based brokers) in favor of another (traditional brick-and-mortar brokers) with the effect of substantially reducing dynamic competition.
 - Both before and after late-2011, TREB has imposed rules that preserve market distortions relating to how competition occurs in the relevant markets. These market distortions include “principal-agent” problems in which agents steer consumers who are interested in buying a home towards properties that offer more attractive commissions or in which agents fail to identify properties that offer low commissions, as well as distortions that serve to elevate the commissions that consumers pay to agents.
- TREB’s abuse of its market power has substantially reduced, and continues to substantially reduce, competition in the relevant markets with the effect of harming consumers in the GTA.

⁵ For convenience, I adopt the short-hand of referring to these markets as the buy-side and sell-side markets for real estate services, or the market(s) for real estate services. The use of this short-hand should not be mistaken as inconsistency in what I view to be the appropriate relevant markets.

- VOWs represent an important form of dynamic competition likely to change how competition among real estate brokers occurs. This dynamic competition promises new services, possibly at lower prices, than are currently available to consumers in the GTA.
- VOWs create significant opportunities for new entrants and for existing firms to increase their shares at the expense of other incumbents. As a result, VOWs constitute a significant competitive threat to incumbent brokers in the GTA.
- By first excluding, and now disadvantaging, VOW-based competition, TREB's conduct substantially reduces the dynamic competition that would have otherwise emerged in the GTA.
- Static competition is not a substitute for dynamic competition. Despite thousands of agents already competing in the GTA, VOWs represent an innovation that can take competition to a new level characterized by even more attractive services and even lower prices than what consumers already enjoy. By reducing dynamic competition, TREB substantially reduces competition and harms consumers regardless of what levels of static competition may exist in the market.
- By imposing its own rules on how competition can occur and evolve, TREB distorts firms' incentives and distorts the competitive process. These distortions include distorted incentives relating to firms' investment decisions, entry decisions, and decisions on what services to offer in an effort to innovate. These market distortions reduce competition and harm consumers.
- Dynamic competition in the form of VOW-based competition would have mitigated market distortions stemming from principal-agent problems and information asymmetries. By reducing that dynamic competition and helping to preserve those market distortions, TREB's past and ongoing conduct substantially reduces competition.

B. The current report

5. Having reviewed the Church Report and the Flyer Report, it remains my opinion that TREB's conduct likely had the effect, and continues to have the effect, of substantially reducing competition and harming consumers in the GTA.

6. My opinions are summarized as follows:⁶
- Drs. Church and Flyer fail to rebut evidence that, through its control of the MLS, TREB controls the manner in which agents and brokers compete in the markets for real estate services. They also fail to rebut the evidence that TREB's substantial market power (or "dominance") stemming from that control of the market allows TREB to maintain prices above, and services and innovation below, what would otherwise exist and emerge in a competitive market in which TREB did not discriminate against brokers seeking to offer VOWs.
 - Drs. Church and Flyer fail to rebut evidence that TREB's *pre-2011* conduct substantially reduced competition.
 - Dr. Church is largely silent on, and offers no evidence rebutting, my opinion that TREB's pre-2011 conduct substantially reduced competition.
 - Dr. Flyer offers no real evidentiary support for his arguments that TREB did not substantially reduce competition. Dr. Flyer also fails to acknowledge that competition is reduced when conduct prevents firms from offering services in a way that is more attractive to consumers.
 - Drs. Church and Flyer are largely silent on, and offer no evidence rebutting, my opinion that TREB's *post-2011* conduct substantially reduced competition with respect to its discriminatory restrictions regarding withdrawn, expired, suspended and terminated (WEST) listings and pending sales.
 - Drs. Church and Flyer's principal focus on TREB's post-2011 conduct pertains to a single aspect of TREB's conduct: discriminating against certain brokers by prohibiting them from using VOWs to distribute MLS information to their consumers regarding *sold listings*.⁷
 - Dr. Church fails to support his claim that TREB's rules prohibiting brokers from providing MLS information to their customers via VOWs, rather than through more traditional means such as emails or in person, are unlikely to reduce competition.⁸ In

⁶ These opinions supplement the opinions I previously set forth in my June 22, 2012 report. There are also a number of secondary issues over which I disagree with Drs. Church and Flyer. While I do not address each one of those areas of disagreement, my silence should not be taken as agreement.

⁷ Dr. Church also provides a very abbreviated discussion of whether restrictions relating to information on buyer commissions likely reduces competition.

⁸ Throughout this report, my references to a broker's customers are to the individual buyers and sellers with whom brokers have entered into a relationship so that they can provide those individuals with MLS information (whether over a VOW or through more traditional means). There is no claim that individuals with no such broker relationship should be entitled to access that MLS information.

particular, Dr. Church's arguments here are conceptually flawed, inconsistent and largely unsupported by facts.

- ◆ In fact, the methodology that Dr. Church relies upon predicts that limiting consumer information will create market distortions on the order of approximately \$100 million per month (i.e., approximately *\$1.2 billion per year*) in the GTA.
 - ◆ In addition, the methodology that Dr. Church relies upon generally *confirms* other evidence that "steering" problems caused by a principal-agent relationship create significant market distortions that reduce competition. VOWs would mitigate those market distortions, and thus increase competition and benefit consumers in the GTA.
- Dr. Flyer's arguments that TREB's conduct does not substantially reduce competition rest principally on his claim that consumers place little value on sold information. This claim, for which Dr. Flyer provides no reliable supporting evidence, is contradicted by a wide body of evidence.
- Neither Dr. Church nor Dr. Flyer offer any plausible arguments or evidence suggesting that TREB's restrictions on how brokers can use VOWs to compete are justified by business considerations, nor do they offer any evidence that their predictions of competitive harm have come to pass in areas where brokers can operate their VOWs in a manner envisioned by the proposed remedy.

II. CLARIFICATION OF CERTAIN KEY ECONOMIC ISSUES

7. Drs. Church and Flyer present their arguments in a manner which sometimes distracts attention from the key economic issues.⁹ To correctly analyze TREB's conduct, clarification regarding several issues is important.

A. The dispute is over how brokers provide information, not what information they provide

8. Although Dr. Church refers to an essential facilities framework when discussing his analysis of TREB's conduct,¹⁰ such a framework has no economic relevance in this matter. I am

⁹ Portions of Dr. Church's discussion that are more distracting than illuminating include his arguments and discussion relating to two-sided platforms; reverse cellophane issues; the relevance of UK real estate markets; essential facilities frameworks; Ricardian vs. Monopoly vs. Quasi rents; and credit card markets. This is not to say that these issues have absolutely no relevance to the real estate industry. In my opinion, however, Dr. Church's discussion of these topics does little to clarify or inform about the key economic issues in this case, and any rebuttal regarding his specific arguments about those topics would only serve to further distract attention from the more relevant economic questions in this case.

¹⁰ Church Report at ¶¶ 19, 168-170, 259 and 286.

aware of no argument, however, that TREB is being asked to provide third-party competitors with access to TREB's own "facilities" or data.

9. Discussion about essential facilities arguments distracts from the actual economic question in this case: what are the competitive effects of TREB restricting the manner in which brokers provide information that they *already routinely provide* to their customers, thus forcing brokers to continue using traditional methods to provide that same information to consumers?¹¹ Does that restriction deprive consumers of a means by which they prefer to be provided real estate information, and thus eliminate a new means by which brokers would otherwise have incentives to compete? And does that restriction force brokers to continue relying on traditional, but higher-cost, means of doing business rather than adopting new, innovative means of providing those services, which in turn prevents VOW-based brokers from passing along their cost savings in the form of lower commissions?

10. Drs. Church and Flyer suggest throughout their reports that the manner in which brokers distribute real estate information to their customers does not matter: that consumers' inability to access real estate information over their broker's VOW website is unimportant because those consumers can instead get the very same information by simply asking their broker for that information and having the broker then fax or email them that information. Their suggestion that consumers do not care about how they get real estate information conflicts with the substantial body of evidence that the method of *distribution is very important to consumers*.¹²

- Canadian Real Estate Association's (CREA's) CEO acknowledges the importance of their own website (Realtor.ca) that offers some of the same information that that brokers have traditionally provided through other means: "Realtor.ca has been consistently identified by CREA members as one of the most important services provided by CREA. It is also a popular resource for consumers to gather information ... as it allows them to privately search through listings without the need to call a broker"¹³

¹¹ See, for example Flyer Report at ¶ 25 acknowledging that "consumers already have available to them through their broker (perhaps via a phone call or an email)" the various MLS data (including the "confidential data") that TREB prohibits brokers from also providing to those consumers over a VOW. This highlights that the economic dispute is not over whether TREB should be restricting access to "confidential" data as brokers are *already* providing those data to their customers through traditional means.

¹² Distribution encompasses not just the physical manner in which the information is delivered (e.g., phone, fax, Internet, in person), but also timing considerations: can consumers get answers to their inquiries almost immediately (as is the case when searching Internet sites), or will there be delays between the time the inquiry is made to a broker and the broker can respond? These timing considerations may be particularly important when inquiries are made outside of normal working hours (e.g., evenings, weekends or holidays) or during periods when brokers may be particularly busy, and thus less likely to immediately respond to information requests. This issue is discussed further in Section V.C.1 below.

¹³ Witness Statement of Gary Simonsen (CREA), August 3, 2012 at ¶ 29 (hereafter, "Simonsen (CREA) Statement"). See also Simonsen (CREA) Statement at ¶ 67 in which he characterizes "[t]he modern consumer who

- CREA's CEO provides evidence that the number of unique visits to Realtor.ca increased by approximately 23 percent in the first six months of 2012 compared to the same period in 2011.¹⁴
- CREA's CEO indicates that the "increasing influence of the internet and the changing demands of consumers" and "the increasing use by consumers of the internet to research real estate" were behind CREA's decision to develop its Data Distribution Facility (DDF) to facilitate consumers' ability to access real estate information over the Internet.¹⁵
- Dr. Church acknowledges that "[i]ncreasingly, potential buyers undertake at least some preliminary searching of their own online before engaging the services of a broker. Already in 2003, a Canadian survey found that 85% of people who had purchased a house in the past two years had used the Internet as part of their search."¹⁶
- NAR's 2011 Profile of Home Buyers and Sellers makes clear that the Internet has become a very important means by which home buyers seek real estate information, and that the Internet's importance continues to increase over time:

"Real estate agents and the Internet continue to be the most highly rated sources of information in the home search process. The use and usefulness of real estate agents and the Internet continue to be the most important sources in the home search process.... Ninety-seven percent of buyers ranked the Internet at least somewhat useful.... Where buyers found the home they purchased has changed drastically since 2001. In 2001, 8 percent of buyers found their home on the Internet; today 40 percent of buyers find the home they ultimately purchased on the Internet. The Internet has edged out all other sources in the process. The real estate agent remains the second most common source at 35 percent, but it has declined steadily from 48 percent in 2001."¹⁷

- NAR's 2011 Profile of Home Buyers and Sellers makes it clear that the Internet has become very important to home sellers, indicating that 92 percent of sellers marketed their home on the Internet.¹⁸

increasingly uses the internet to become informed and therefore wants *quick access* to the information they think they need." (*emphasis added*)

¹⁴ Simonsen (CREA) Statement at ¶ 32. Simonsen provides data on a monthly basis from January to June in 2011 and 2012. Although the 23 percent statistic I report aggregates over that time period, Simonsen shows that on a specific month-to-month basis the increase ranges from 11 percent to 31 percent.

¹⁵ Simonsen (CREA) Statement at ¶¶ 49-55.

¹⁶ Church Report at ¶ 50.

¹⁷ "Profile of Home Buyers and Sellers," NAR, 2011, pages 41-43. Exhibit A shows the dramatic increase since 2001 in the share of home buyers who found the home they purchased on the Internet.

¹⁸ "Profile of Home Buyers and Sellers," NAR, 2011, pages 97 and 101.

- As stated by TREB in its 2009/2010 Strategic Plan, consumers want access to as much information as possible, particularly on the Internet: "... the public demand[s] more instantaneous communications and access to information, particularly via the Internet."¹⁹
- In a 2011 letter, the President of Nova Scotia Association of Realtors made clear how important the Internet is for home buyers and sellers: "From the perspective of REALTORS®, no service offered by the CREA is more important than a useful and attractive consumer real estate information website."²⁰
- Evan Sage of Sage Real Estate in Toronto notes in his Witness Statement that "[t]oday's consumer is web-focused, and consumes media through the internet. 87% of Buyers use the web during their home search. Consumers expect a better online experience when searching for a home, and our brokerage uses new technology to deliver just that Because 87% of buyers use the web during their home search we focus an incredible amount of time and effort making sure our listings get maximum exposure online."²¹

11. This evidence makes it quite clear that consumers *do* care about how they access real estate information. A substantial number of consumers clearly want to use the Internet rather than rely on traditional, and less efficient, means. This consumer demand for Internet-based forms of real estate information delivery creates an important new opportunity for brokers to offer innovative VOWs as a means of distinguishing themselves from their rivals and competing for consumers.

12. As discussed in my June Report and below, brokers' VOWs offer an opportunity for consumers to access even more real estate information than is available through other Internet sites (including Realtor.ca). As a result, despite the proliferation of Internet-based websites that offer *some* real estate information, VOWs that allow brokers to provide consumers with access to *all* the MLS information that those brokers would have to deliver through alternative means provide significant incremental consumer benefits.

13. The importance of allowing consumers to access the excluded data fields using a broker's VOW rather than having to contact their broker every time they want to see this information stems in significant part from how consumers use this information. Although buyers generally seek out information about the excluded data fields when trying to decide how much to offer on a particular home, they also use this information during the "incubation" phase in which they are learning about the market, learning about how list prices differ from sales prices, and learning

¹⁹ TREB Strategic Plan, 2009/2010, September 17, 2009 (MBEF0018_00001941/TREB00057729 at TREB00057735).

²⁰ Letter to Gary Morse, President of CREA, from Robert L. Faulkner, President of NSAR, November 28, 2011 (TREB00008190).

²¹ Witness Statement of Evan Sage (Sage Real Estate), July 27, 2012 at ¶¶ 6-7.

about how to assess home values. During this period, a consumer may frequently access information about the excluded data fields as they consider different communities and different price ranges over a period of several months. Thus, the question is not whether a broker could just as easily (and costlessly) provide the excluded data on a one-time basis when a buyer is looking to make an offer on a particular home; the question is whether the broker could just as easily (and costlessly) provide those data on an ongoing basis to the same customer and provide that information in as timely a manner as would be the case if the customer instead accessed the information directly from the broker's VOW.²²

B. The incremental benefit of VOWs depends on the conduct at issue

14. Drs. Church and Flyer claim that consumers' valuation of VOWs and the competitive significance of VOWs are not relevant.²³ Instead, they argue that only VOWs' *incremental* value from making available information about the excluded data fields is important.²⁴ The accuracy of this claim, however, depends on context.

15. With respect to analyzing TREB's conduct in the post-2011 period in which the only conduct at issue is their continued prohibition of brokers showing the excluded data fields on their VOWs, Drs. Church and Flyer are correct to this extent: the appropriate analysis compares a but-for world in which that incremental information is available with the world in which that information is not available. This is, in fact, the analysis that I present in my June Report with respect to TREB's post-2011 conduct.

16. A different comparison, however, is warranted for evaluating the competitive effect of TREB's pre-2011 conduct. Here, TREB's conduct did not simply prohibit brokers from showing the *excluded* data fields on their VOWs. Instead, by preventing brokers from showing *any* MLS information on their VOWs, TREB effectively prevented the emergence of VOWs in the GTA.

²² The same logic also applies to home sellers: like buyers, sellers may also want to access information about the excluded data fields in order to know whether to adjust their list price.

²³ See, for example, Flyer Report at ¶ 5(1)(c) in which he suggests that the competitive significance of VOWs is not at issue and that the only issue is the incremental value of allowing brokers to use their VOWs to show the excluded data fields.

²⁴ Although Dr. Church uses the terminology "confidential data fields", it is important to recognize that the excluded data fields extend beyond what TREB refers to as the confidential data fields. As noted in my June Report, TREB's VOW data feed also appears to have excluded non-confidential data such as days on market, price change information, open house information, virtual tour URL links, and accurate geocoding information. See Vistnes June Report at ¶ 80. (I understand that since the filing of my June report, TREB has begun taking steps to add excluded, but non-confidential data to its VOW feed.) In addition, not all of what TREB often refers to as the "confidential data fields" are part of the excluded data fields at issue in this case: although the seller's name and contact information, and instructions or remarks intended for cooperating brokers only (e.g., comments regarding showings or security systems) are often referred to as confidential data fields, those data fields are not at issue in this case. Finally, as noted above, while TREB refers to many of the excluded data fields as "confidential," the fact that brokers routinely provide this information to their consumers through distribution means other than VOW websites speaks to the fact that the data are not strictly "confidential."

Thus, as discussed in my June Report, the relevant economic question with respect to TREB's pre-2011 conduct is whether TREB's effective exclusion of VOWs in their entirety reduced competition. To answer that question, the appropriate comparison is between a world with VOWs and one without VOWs. For that analysis, one needs to assess consumers' overall valuation of VOWs in providing the *full* range of MLS data, not just the incremental value of VOWs being able to offer the excluded data fields in addition to other MLS data fields.

C. TREB's dominance and exercise of market power

17. An important question in this case is whether TREB is dominant and thus "controls" a class or species of business, usually interpreted as a relevant product market.²⁵ This concept of dominance corresponds to how economists typically think of market power.²⁶ Once TREB's dominance in a relevant market is established, one can ask whether TREB has used or abused that dominance to reduce competition in a relevant antitrust market.

18. As shown in my June Report, the relevant markets over which TREB enjoys control are the markets for buy-side and sell-side real estate services. Through its control of, and dominance in, the relevant market, TREB's conduct maintains the real estate brokerage prices (commission levels) above competitive levels, and services and innovation below competitive levels.²⁷ This reduction in competition, and harm to consumers, arises despite the fact that TREB itself does not participate in the relevant market; rather, TREB exerts its market power and reduces competition on behalf of the real estate brokers and agents that it represents.

1. The market at issue concerns brokerage services, not confidential data

19. Dr. Church argues that the relevant market at issue in this case relates to "confidential data" and focuses much of his report on the questions of whether brokers and consumers value that information, and whether similar information might be available from other sources. Yet, while those questions are important ones, they are not the only questions or even the most important questions.

20. As recognized in a document sent to CREA's Board of Directors, "some [brokerages] may choose to be more competitive and enhance how they present the [MLS] data to the Client."²⁸ The fundamental economic question in this case is whether TREB's conduct has

²⁵ See Section 79 of the *Competition Act*. [<http://www.laws.justice.gc.ca/eng/acts/C-34/index.html>.]

²⁶ Dr. Church also appears to accept the general economic equivalency of "dominance" and "substantial market power." See, for example, Church Report at ¶¶ 151 and 247.

²⁷ See Vistnes June Report at Sections VIII and IX. See also the Vistnes June Report at ¶¶ 85-109 and Section V.A.1 below for evidence supporting my opinion that buy-side and sell-side real estate services providing MLS accessibility constitute a relevant market and why Dr. Church's claims to the contrary are without basis.

²⁸ MLS and Technology Council Memorandum to the Board of Directors of CREA, March 2009 (CREA00001250).

substantially reduced, and continues to substantially reduce, that competition in how brokers compete to provide *real estate services*.

21. In assessing the evidence relating to that question, one needs to consider the subsidiary issues of brokers' access to other sources of data, and consumers' valuation of those data. But those questions about *data* are subsidiary to the ultimate question of how (or whether) TREB's restrictions and discriminatory conduct affects how brokers compete to provide real estate *services* to consumers in the GTA.

2. *TREB has substantial market power (dominance) in the relevant markets*

22. Dominance and market power are manifested by "control" of a market. As discussed in detail in my June Report, TREB controls the markets for buy-side and sell-side real estate services.²⁹ This control stems from TREB's control of the MLS and consequent ability to control the manner in which brokers compete and whether a broker is allowed to compete in that market. Thus, TREB has "market dominance" in the relevant markets.

23. TREB's control of the markets for real estate brokerage services is clear.

- *First, real estate brokers and agents depend on having access to TREB's MLS data.* Consumers expect their broker to have access to the MLS: absent MLS access, buy-side brokers will be unable to show prospective clients the full range of homes available for sale or provide all the information about those homes, and sell-side brokers will be unable to expose the seller's home to the full range of buyers. CREA acknowledges this on its own Realtor.ca website: "Another advantage of working with a REALTOR is the far-reaching market exposure your home will receive through the Multiple Listing Service (MLS) The greater the exposure your home receives, the more likely you are to find a buyer willing to pay your price."³⁰
- *Second, from a broker's perspective, there are no viable alternatives to TREB's MLS.* There are no data sources that are as comprehensive, up-to-date, and reliable as TREB's MLS when it comes to residential real estate information. From a buy-side broker's perspective, other brokers' Internet Display Exchange ("IDX") websites in the GTA would not be a reliable means of discovering which houses were on the market. As noted in my June Report, there are many areas in the GTA in which up to 70 percent of homes would not show up.³¹ Similarly, a broker relying on Realtor.ca would not have access to any of the excluded data fields that do not appear on that site. And from a sell-side

²⁹ Vistnes June Report at ¶¶ 141-163.

³⁰ <http://www.realtor.ca/StaticPage.aspx?f=Selling>.

³¹ Vistnes June Report at ¶¶ 225-226.

broker's perspective, there are no acceptable alternatives: here, IDX websites and Realtor.ca have no value since a sell-side broker that is excluded from TREB's MLS cannot directly place their listings either on a competing broker's IDX website or on Realtor.ca.

Dr. Church appears to acknowledge the importance of the MLS to brokers, stating “[t]he principle underlying the MLS is that by sharing their listings, Realtors maximize the chance of successfully finding a buyer for the properties in their inventory. Only agents that are members of CREA and have mandates from sellers are able to list properties on an MLS.”³² Dr. Church further acknowledges that “The MLS is the tool most commonly used by agents in Canada to list information about properties for sale. Exposure to the largest possible audience maximizes the chances of successfully selling a property.”³³ Thus, it is little wonder that consumers will want to work with agents that have access to the MLS, and thus are more likely to be able to successfully sell their property.

- *Finally, there is no realistic likelihood of entry with respect to a competing MLS provider.* Dr. Church's own argument that there are important network effects associated with TREB's MLS provides additional evidence that TREB is unlikely to face competition from other MLS providers. Since MLSs are network goods, any customers would incur a significant disadvantage if they switched to a rival MLS in which there were few other users. These network effects mean that entry is extremely unlikely, thus leaving TREB as the sole provider of the MLS services upon which brokers depend. This supports Dr. Church's stated conditions for there to likely be market power: “The combination of high barriers to entry and high market shares is often presumed to indicate market power.”³⁴

24. Thus, through its control over whether a broker can, or cannot, have access to its MLS data, TREB controls who can compete in the market. And through its ability to put conditions on how brokers compete (e.g., can they provide information to their customers using an Internet website, or do they have to instead provide that information through other means?) TREB controls the manner in which brokers can compete.³⁵

³² Church Report at ¶ 38.

³³ Church Report at ¶ 39.

³⁴ Church Report at ¶ 185.

³⁵ As seen by the experience of Mark Enchin (Realty Executives Plus), TREB clearly has the ability to punish brokers who violate its rules. When Enchin tried to compete in a manner that violated TREB's rules, TREB cut off Enchin's MLS access, thus effectively driving him from the market. Two other brokers had a similar experience with TREB and had their access to the MLS terminated. See Vistnes June Report at ¶ 75 and, for example, Witness Statement of Mark Enchin (Realty Executives Plus), June 19, 2012 at ¶¶ 28-31 (hereafter, “Enchin (Realty Executives Plus) Statement”).

25. The principal rebuttal that Dr. Church offers on whether TREB controls the manner in which brokers can compete is to suggest that brokers may not need access to TREB's MLS. In support, he notes that in some countries (e.g., the United Kingdom), real estate is bought and sold without the existence of an MLS, and from this, he asserts that this means brokers in the GTA might be willing to go without an MLS.³⁶ What Dr. Church fails to acknowledge, however, is that it is a very different thing for a broker to succeed without an MLS when none of the broker's competitors have access to an MLS (as is the case in the United Kingdom) than it is for a broker to drop out of an MLS and succeed when that broker's rivals all continue to use an MLS. In fact, any broker that withdrew from the MLS would likely quickly find that most buyers and sellers were unwilling to work with him, making withdrawal from the MLS virtually suicidal from a business perspective.

3. *TREB can reduce competition despite not participating in the relevant market*

26. One might ask whether it is economically relevant that, because TREB itself does not offer real estate services, TREB does not itself compete in the relevant market in which it is dominant. The answer is that, as long as TREB's dominance provides it with the ability to reduce competition in that market, TREB's participation or non-participation in the market is largely irrelevant from an economic perspective. As long as TREB acts on its members' behalf in a way that affects how those members compete, TREB's conduct is economically significant and cannot be dismissed simply because TREB itself is not a market participant.³⁷

27. Dr. Church explicitly acknowledges that TREB operates on behalf of the agents and brokers that compete in the relevant market, stating that TREB "is run by its Members for the benefit of its Members."³⁸ TREB's CEO further confirms Dr. Church's opinion that TREB is a vehicle through which member agents and brokers work to further their own interests, stating, "TREB's core purpose is to advance the continuing success of its Membership."³⁹

28. As long as TREB serves as a vehicle through which its members can act to promote their own self-interest, TREB's conduct can be expected to largely mimic those members' collective

³⁶ Church Report at ¶ 47.

³⁷ To conclude otherwise would suggest that competitors in any industry could form a trade group that itself did not compete to provide goods or services and then use that trade group as a means to reduce competition. For example, trade groups or professional organizations could form and require that lawyers impose minimum fees or that supermarkets or auto dealerships close on Sundays and in the evenings. As long as those trade groups or organizations have the ability to enforce those rules, such rules would likely have the effect of substantially reducing competition despite the fact that the rules were put in place by a party that was not competing in the relevant market.

³⁸ Church Report at ¶ 12. See also Church Report at ¶ 43 in which he acknowledges that TREB is "representing the interests of the real estate professionals in the Greater Toronto Area."

³⁹ Witness Statement of Donald Richardson (TREB), July 27, 2012 at ¶ 5. See also Simonsen (CREA) Statement indicating that CREA is "the national voice for the Canadian real estate industry" and that its "key objectives include national representation of the industry...." [Simonsen (CREA) Statement at ¶ 6.]

preferences. Thus, from an economic perspective, it does not matter that TREB uses its market dominance to benefit its members rather than itself: what matters is that TREB's market dominance substantially reduces competition among TREB's member agents and brokers and thereby harms consumers in the GTA.

4. *TREB's conduct maintains prices above, and service levels and innovation below, competitive levels*

29. As discussed in my June Report, absent TREB's prohibitions on how brokers can use VOWs to compete, brokers would likely realize lower costs and offer lower commission rates (or "prices"). Thus, TREB's conduct increases prices in the relevant markets above the competitive rates that would otherwise emerge but for TREB's conduct. Similarly, absent TREB's prohibitions, brokers would offer more innovative and more valued services. Accordingly, TREB's conduct reduces services, quality and innovation below the competitive levels that would have emerged but for TREB's conduct. It follows that TREB's conduct has increased prices, and reduced dimensions of non-price competition (service, quality and innovation), relative to what would have been the case but for TREB's conduct.

30. The conclusion that TREB has increased prices, and reduced non-price competition, relative to the but-for world in which TREB had not imposed restrictions on how brokers can use VOWs to compete is in no way obviated by Dr. Church's argument that no individual agent or broker (or even franchise brokerage) in the GTA has significant market power. Similarly, the conclusion would not be obviated by an argument that TREB's conduct will not create any significant market power for any individual agent or broker. In fact, TREB's conduct is *not* likely to have a significant effect on any individual agent's or broker's market power. Regardless of whether TREB allows brokers to compete with VOWs, there is likely to be significant competition among those agents and brokers.

31. This lack of significant market power on the part of any individual agent or broker, however, does not in any way ensure that TREB's conduct does not reduce *dynamic* competition. As discussed in my June Report, TREB's conduct prevents dynamic competition in which a market progresses from one state of the world to a new state of the world, where that new state of the world promises lower prices and higher services and innovation.⁴⁰ In each state of the world, there is likely to be significant competition among brokers and agents, and thus likely to be limited market power for any individual firms. By preventing the innovation necessary to move to that new state of the world, however, TREB prevents a reduction in the competitive market price even if TREB is not creating or maintaining the amount of market power enjoyed by any

⁴⁰ This new state of the world need not be dramatically or discretely different from the old state: even incremental changes can yield substantial consumer benefits. Moreover, incremental change over the near term is often necessary to achieve more dramatic change over the longer term. Thus, allowing firms to block incremental change on the basis that it is too small (in the short-run) to matter may have the ultimate effect of preventing more dramatic long-term change.

individual agent or broker. By preventing this price reduction (and increase in service and innovation), TREB's exercise of market power substantially reduces competition and harms consumers.

32. Rather than provide a reason to believe that TREB's conduct is unlikely to reduce competition, the existing competition among brokers in the GTA real estate market helps put brokers' desire to offer VOWs in a useful perspective. Competition limits any individual firm's profits unless the firm can somehow differentiate itself from its rivals. As a result, competition creates strong incentives for firms to innovate as a means of breaking away from the pack and increasing profits. The same incentives are at work in the real estate services market in the GTA. VOWs enable brokers an opportunity to offer new, attractive services to consumers, possibly at lower commission rates. By doing so, brokers can differentiate themselves from the competition and earn increased profits.

33. The incentive for firms in competitive markets to earn profits by offering new, innovative services is generally viewed as a significant benefit of competitive markets.⁴¹ As stated by one prominent antitrust commentator, "It is exactly this process of fierce competition between rivals that leads firms to strive to offer higher quality goods, better services and lower prices."⁴² Thus, brokers' use of VOWs should not be viewed as competitively inconsequential because of the existing competition among brokers. Rather, brokers' use of VOWs should be viewed instead as a natural consequence of that competition, and conduct that squelches such innovation and efforts to compete constitutes a reduction of competition.

D. There is no clean dividing line distinguishing VOW-based brokerage services

34. Drs. Church and Flyer argue that it is important to ask what services are offered by VOW-based brokers and then ask whether VOW-based brokers are unique in offering those services. They suggest that if those services are also offered by "traditional" brokers without VOWs then VOW-based brokers offer nothing competitively significant.

35. In making this argument, Drs. Church and Flyer suggest a false dichotomy from which they draw incorrect conclusions. As discussed in my June Report, brokers can vary in the extent to which they incorporate VOWs into their business model and way of competing: some brokers adopt VOWs as their principal means of interacting with, and competing for, consumers, while

⁴¹ Even though these profit opportunities may be short-lived if competitors respond by similarly adopting those new, attractive technologies, even short-run profit opportunities can be attractive. This drive to innovate in order to realize short-run profit opportunities is, in fact, a hallmark of many of the most innovative industries (e.g., personal electronics where first-round innovators earn profits, only to find it necessary to continue innovating because others copy their innovations).

⁴² Speech by (then) Deputy Assistant Attorney General William Kolasky, Antitrust Division, U.S. Department of Justice, "The Role of Competition in Promoting Dynamic Markets and Economic Growth," November 12, 2002, available at <http://www.justice.gov/atr/public/speeches/200484.htm>.

other brokers adopt VOWs as simply one more means by which they can serve their customers.⁴³ Similarly, VOWs should be viewed as a new means by which brokers can provide the same basic services they have always offered their customers rather than a means by which brokers can offer entirely different services.⁴⁴

36. The relevant economic question here is not whether VOWs allow brokers to offer services that are completely unique relative to the services that brokers have traditionally offered. Rather, the question is whether VOWs allow brokers to provide services that offer significant incremental benefits, even if the basic service (e.g., informing customers about real estate listings) can also be offered through more traditional means. And if TREB's conduct means that brokers cannot differentiate themselves from their competitors by offering consumers a new, more attractive means by which to acquire real estate information, then competition is reduced and consumers are harmed. This result occurs *despite* the fact that those real estate services remain available to consumers through more traditional, albeit less attractive or less efficient, means. This evolution in how brokerage services are provided constitutes the dynamic competition discussed in my June Report, and is an important form of competition that can be expected to benefit consumers in the GTA.⁴⁵

E. Key questions for assessing TREB's conduct

37. Although there are many nuances to the competitive analysis of TREB's conduct, Dr. Church and I appear to agree that the following economic questions are key to understanding whether TREB's conduct likely substantially reduced competition.⁴⁶

- Is there a relevant antitrust market that TREB controls and in which TREB has substantial market power (i.e., it is "dominant")?
- If TREB enacts discriminatory rules prohibiting brokers from using VOWs to make MLS information available to their customers, can brokers find alternative sources providing comparable information without incurring significantly increased costs?
- If brokers cannot readily substitute to an alternative source of information, does this harm VOW-based brokers by reducing the attractiveness of the services they offer to their customers? If TREB's conduct harms competing brokers by preventing them from using

⁴³ See Vistnes June Report at ¶¶ 47 and 58-71.

⁴⁴ Accordingly, when I refer to "VOW-based brokers", I refer to any broker utilizing a VOW, regardless of the extent to which they rely on the VOW relative to other means of interacting with customers.

⁴⁵ See Vistnes June Report at ¶¶ 48 and 177-180.

⁴⁶ This is not to say that there is complete agreement over the proper economic framework of the analysis. Most of those areas of disagreement, however, are of secondary or no relevance to the principal economic issues in this case.

VOWs to provide real estate information to their customers, does that reduce competition among brokers?

- Whatever the current level of competition among brokers, would the elimination of TREB's restrictions increase dynamic competition with the result that consumers benefit from the provision of even more innovative, desirable brokerage services than is currently the case, at possibly even lower prices?
- Is competition in real estate markets distorted by principal-agent problems, and is TREB's conduct preventing VOWs from reducing those problems, thus raising prices and harming consumers by distorting competition?

38. Much of this report focuses on showing that the evidence relating to these key questions is more consistent with a conclusion that TREB's conduct has substantially reduced, and is continuing to substantially reduce, competition than Drs. Church and Flyer suggest.

III. DRS. CHURCH AND FLYER FAIL TO REBUT EVIDENCE THAT TREB'S PRE-2011 CONDUCT SUBSTANTIALLY REDUCED COMPETITION

39. TREB's pre-2011 conduct substantially reduced competition and harmed consumers in the GTA. This harm arose because TREB's prohibitions on brokers using VOWs to provide *any* MLS information to their customers effectively prevented brokers from offering VOWs. As a result, instead of using VOWs to provide the information to consumers, brokers were forced to rely on more traditional means of distributing that same information.

40. As discussed in my June Report, TREB's conduct substantially reduced competition for several reasons.

- First, by effectively preventing brokers from offering VOWs in the GTA, TREB prevented brokers from offering customers a means of accessing real estate information in the way many consumers prefer: rather than accessing this information via an Internet website, consumers were forced to request that their broker send them the information through other more traditional means (e.g., phone, fax or email). Preventing brokers from offering consumers a more attractive service reduces competition and harms consumers.
- Second, TREB's prohibitions increased VOW-based brokers' costs relative to what they would otherwise be. As long as brokers are forced to provide information to their consumers via phone, fax or other traditional means, brokers will be forced to spend valuable time serving as an information conduit, even though that information can be provided more efficiently (and without the need for the broker's direct involvement) via a

VOW website.⁴⁷ By effectively increasing VOW-based brokers' costs relative to what they would otherwise be, TREB reduces brokers' ability and incentive to compete by offering lower commissions to GTA consumers.

- Third, TREB's prohibitions help preserve market distortions that reduce competition and that benefit brokers at the expense of consumers. VOWs can reduce consumers' dependence on brokers, and thus reduce consumers' need to increase commission payments as a means of inducing broker effort.⁴⁸ In addition, by providing consumers with greater information from which they can assess home values and greater information regarding brokers' incentives to steer them towards or away from particular homes depending on the compensation the broker receives, VOWs can increase competition and benefit consumers.

41. Neither Dr. Church nor Dr. Flyer offer any real rebuttal to this evidence that TREB's pre-2011 conduct substantially reduced competition in the GTA.

A. Dr. Church is largely silent about TREB's early conduct

42. Dr. Church offers no opinion or evidence regarding TREB's pre-2011 conduct. Instead, Dr. Church attempts to dismiss the entire issue by asserting that "[t]he competitive implications of VOWs [and whether TREB's past conduct preventing VOWs from emerging earlier] are *irrelevant*: what is relevant is only the possible competitive harm of the *ongoing* conduct"⁴⁹

43. Given his view that TREB's pre-2011 conduct is irrelevant, it is not surprising that Dr. Church offers no evidence regarding the effects of TREB's pre-2011 conduct on competition. Rather, his arguments are largely limited to the observation that, "the competitive significance of VOWs and 'innovative' brokerage models even in the absence of any restrictions should not be overstated."⁵⁰ Yet, as discussed in detail in my June Report, there is no need to "overstate" the competitive significance of VOWs in order to conclude that VOWs are competitively significant and offer significant benefits to consumers. Instead, the evidence demonstrates the clear competitive significance of VOWs, and thus it follows that TREB's pre-2011 discriminatory

⁴⁷ As stated by William McMullin, Chief Executive Officer of ViewPoint Realty Services, Inc., "We recognized early on that the education of buyers and sellers, and the preparation of CMAs, are both very labour intensive for Realtors." Witness Statement of William McMullin (ViewPoint), June 18, 2012 at ¶ 81 (hereafter, "McMullin (ViewPoint) Statement").

⁴⁸ See Church Report at ¶¶ 74-75: "it is well known that commissions are a way to elicit effort and better advice..."

⁴⁹ Church Report at ¶ 179, *emphasis added*. See also Church Report at ¶ 17 which states, "A focus on the benefits of VOWs is not appropriate, since that is not the relevant but-for world." But the benefits of VOWs is entirely relevant to the question of what the historical but-for world would have looked like absent TREB's restrictions, and thus how TREB's conduct reduced competition in that pre-2011 world.

⁵⁰ Church Report at ¶¶ 18, 282 and 285.

conduct preventing certain brokers from competing by offering VOWs had the effect of substantially reducing competition.

B. Dr. Flyer fails to rebut evidence that TREB's conduct reduced competition

44. Although Dr. Flyer offers several arguments for why VOWs might provide no consumer benefits, his arguments are flawed and largely unsupported by the evidence.

1. Alternative websites are not good substitutes

45. Dr. Flyer argues that consumers can search websites other than TREB's MLS to obtain real estate information.⁵¹ The websites that Dr. Flyer cites as capable of providing this information are Realtor.ca and IDXs.⁵² Neither, however, is a satisfactory substitute to TREB's MLS.

a) IDXs do not provide comprehensive listings information

46. As discussed in my June Report, IDX participation in the GTA is far from complete. In many areas of the GTA, an IDX-based website would exclude at least 30 percent of listings, with as many as 70 percent of listings missing from some areas.⁵³ Overall, TREB's IDX data feed excludes approximately half of all listings.⁵⁴

47. The IDX data feed in the GTA, and thus the information available to consumers, is also incomplete relative to what is available in the full MLS data feed. In particular, IDX websites exclude the same data fields that TREB currently excludes from its VOW data feed: information regarding sold properties, pending sales, WEST listings, and offered compensation to the buy-side agent. Thus, buyers seeking information about *all* (or even most) of the listings that meet their search criteria would find that IDX sites are not close substitutes for VOWs and TREB's MLS.

⁵¹ Flyer Report at ¶ 18.

⁵² I understand that CREA is establishing a national data distribution facility (DDF) that will, among other things, provide third-party websites with some information from the MLS. I understand, however, that brokers can opt out of providing listings ["Data Distribution Policy and Rules," CREA, November 4, 2011 (CREA00033030 at '030).] and the information provided through the DDF to the third-party websites (or any other parties) will exclude competitively important data fields. The CREA DDF Policy and Rules state that "[l]isting content must not display... [a]ny confidential information *including past sales prices, the cooperating commission or fee, etc.* on a National Pool Website or Member Feed Website." ["Data Distribution Policy and Rules," CREA, November 4, 2011 (CREA00033030 at '035), *emphasis added.*]

⁵³ See Vistnes June Report at ¶ 226.

⁵⁴ To confirm this, I conducted my own test in May 2012. I searched for residential properties located in the GTA postal code FSA "M2N" that ranged in price from \$300,000 to \$400,000 and compared the number of listings that were reported by Realtor.ca with those reported by the IDX site operated by Realosophy. I found that Realosophy reported only 50.4 percent of the listings reported by Realtor.ca.

b) IDXs offer fewer services than VOWs

48. IDX and VOW websites differ in an important regard: while consumers using VOW websites must provide their contact information before they can use the VOW, consumers on IDX sites remain “anonymous.” And while this anonymity may appeal to many consumers, it means that IDX websites have no way of alerting consumers about changes in the market. This prevents IDX websites from offering the following types of services that are more common on VOWs and that consumers are likely to value.

- ***IDXs cannot provide immediate notification of New Listings.*** Especially in “hot” real estate markets where homes sell quickly once they come on the market, consumers find it valuable to be immediately alerted when a home fitting their search criteria comes onto the market. A VOW-based broker, because they have consumers’ contact information, can set up the VOW so that the consumer is immediately alerted to any new home that comes on the market fitting that consumer’s search parameters. That alert can also include links so that the consumer can immediately see the specifics regarding the home. In contrast, an IDX has no means by which to contact consumers to alert them of those new listings.
- ***IDXs cannot provide immediate notification of Recent Sales.*** VOWs can also be used to alert consumers when comparable homes (or homes the consumer is interested in) are sold. This information can help educate the consumer as to market activity and market values, and keep the consumer current on their remaining options in a market. IDXs, because they have no consumer contact information, cannot provide this information.
- ***IDXs are more limited in their ability to save information across web sessions.*** VOWs typically offer the ability for consumers to save a “portfolio” of homes in which they are interested, either as possible homes to purchase, or to track or learn about market values and activity, or to compare how different features affect price. This portfolio of saved homes can be readily created and stored because each VOW user has an identity within the VOW. Absent a consumer identity, these features cannot be offered as easily with IDXs: each web session typically requires the consumer to re-enter information and re-do their searches.

c) Brokers’ IDX sites constitute a form of advertising, not competition

49. As TREB recognizes, IDX sites are not a means by which brokers conduct business: they are a means by which brokers *advertise*. As such, the two types of websites serve very different

purposes and should be viewed more as *complements* than as substitutes.⁵⁵ Accordingly, in my opinion, brokers' IDX sites are not a good substitute to VOWs.

d) Realtor.ca is not an alternative to VOW-based broker competition

50. Realtor.ca is a website sponsored by the CREA.⁵⁶ This website is very similar to an IDX and allows consumers to search listings in the GTA (and elsewhere in Canada). Realtor.ca differs from IDX sites in that listing agents can allow their listings to be shown on Realtor.ca while preventing them from being shown on IDX websites.⁵⁷

51. Despite including most listings, Realtor.ca is not a close substitute to VOW-based broker competition for several reasons.

- *Realtor.ca provides an incomplete data feed.* Realtor.ca offers a limited data feed relative to the full MLS data.⁵⁸ Important data fields that are missing from Realtor.ca include:
 - TREB's excluded data fields (sold properties, pending sales, WEST listings, and buy-side commissions);
 - Days on market;
 - Original price;
 - Approximate square footage;
 - Approximate age of home;
 - Property taxes.
- *Realtor.ca is criticized as an inferior provider of services.* In addition to offering only incomplete data, Realtor.ca is criticized as having become "stagnant" over time and offering inferior technology and services.

⁵⁵ The observation that IDX and VOW technologies may be complements rather than substitutes is supported by the observation that some VOWs (e.g., ZipRealty) offer both IDXs and VOWs. This is consistent with brokers using the IDX site as a means of advertising and attracting customers who may be unwilling to initially provide the contact information that VOWs require, and then moving those consumers over to the richer VOW website once those consumers are serious enough about buying or selling real estate that they are willing to agree to the terms of use associated with VOWs.

⁵⁶ Realtor.ca formerly operated as mls.ca.

⁵⁷ To be shown on an IDX, a listing agent must provide its "permission to advertise." To be shown on Realtor.ca, I understand that the agent must allow the listing to be "distributed to internet portals." In the 2007 to 2011 period, approximately 95-99 percent of TREB's listings could be shown on an Internet portal.

⁵⁸ TREB acknowledges that VOWs provide "richer information" to consumers than does Realtor.ca: "This new and exciting policy will increase competition within the system... Consumers can expect access to richer information than found on REALTOR.ca through these VOW's." ["News Release – TREB Takes Further Action to Increase Quality and Protect Consumers' Privacy Rights," TREB, August 25, 2011 (TREB00049464 at '464).]

- An executive vice president and regional director of Re/Max Ontario-Atlantic Canada Inc. stated in a December 2010 Re/Max letter that Realtor.ca “is antiquated and difficult to maneuver.”⁵⁹
- The Nova Scotia Association of REALTORS® (NSAR) was harshly critical of Realtor.ca, and expressed its discontent in a November 2011 letter from NSAR’s President to the President of CREA:

“NSAR leadership hears constantly and consistently from its (and CREA’S) membership that REALTOR.ca *has not kept pace* with today’s market requirements and has *fallen out of favour* with many consumers. It should come as no surprise our members are becoming *increasingly frustrated* with the visible lack of movement by CREA to improve REALTOR.ca, especially given the urgency and the technology available in today’s world. If CREA were a provider of services in a ‘for profit’ world, rather than an organization one must belong to, I can assure you we at the NSAR would have already issued an RFP seeking a product to replace REALTOR.ca ... It is no secret *REALTOR.ca is severely lagging* when compared to other websites currently available to the consumer....In closing, I cannot stress strongly enough the displeasure Nova Scotia’s REALTORS®, who are also CREA’s members, have in the quality of the REALTOR.ca product. As NSAR’s leadership, the Board of Directors must now take action to determine what CREA is doing about improving this *out-of-date product*.”⁶⁰

- In a 2009 memorandum to CREA’s Board of Directors, CREA’s MLS and Technology Council acknowledged that:

“Canada’s system struggles to provide a cutting-edge experience to the end user and we have been criticized for not providing the best user experience. One could argue that in the absence of other competitive forces, CREA has not been as aggressive in staying up to date with technology or the latest trends as it may have been forced to in a market where we would be competing for MLS market share.”⁶¹

As a result of Realtor.ca’s inferior services, Realtor.ca is not a good substitute for consumers relative to the alternative of multiple VOWs competing to offer the most attractive services to consumers.⁶²

⁵⁹ “To: All Real Estate Professionals re: Is It Time to Rethink REALTOR.ca?” Michael Polzler (Executive Vice President and Regional Director of Re/Max Ontario-Atlantic Canada Inc.), December 2010 (TREB00062959).

⁶⁰ Letter to Gary Morse, President of CREA, from Robert L. Faulkner, President of NSAR, November 28, 2011 (TREB00008190, *emphasis added*). Given the nature of a large membership organization like CREA whose membership and their respective regional MLS systems span across Canada, it is not surprising that it struggles to implement the latest technologies. In his response letter, Gary Morse of CREA appears to recognize that the nature of his organization is part of the problem by stating “We recognize that there is need for a change within organized real estate, in particular with regard to the decision making process, which has been neither efficient nor effective, resulting in member needs not being met in a timely manner.” [Reply Letter from Robert L. Faulkner from Gary Morse, December 1, 2011 (TREB00008190).]

⁶¹ March 2009 MLS and Technology Council Memorandum to the CREA Board of Directors (CREA00001250).

⁶² Allowing more vigorous competition from VOW-based brokers may increase Realtor.ca’s incentives to improve the quality of its services. Perhaps because of competition from VOWs in other parts of the country, I note that there have been at least some attempts to expand the services that Realtor.ca offers: see <http://crea-news.ca/?s=realtor.ca>,

- *Realtor.ca is not a means by which brokers compete.* Realtor.ca is not a means by which brokers compete for customers: it creates no incentives for individual brokers to innovate or excel in the services they provide, or to offer lower prices to consumers. Instead, Realtor.ca is a means by which the industry can collectively try to inform consumers about the real estate market without favoring, or disfavoring, any particular broker. Thus, Realtor.ca can be viewed as a type of industry-level advertising. It is not, however, a form of broker-specific competition.

The conclusion that Realtor.ca serves a very different purpose from an MLS was confirmed by CREA's Corporate Counsel in his April 2011 speech:

“To begin with, an MLS System is not an advertising vehicle Listings that are placed on Boards' MLS Systems are then uploaded to Realtor.ca, which definitely is an advertising vehicle. It is, however, a mistake to confuse Realtor.ca with an MLS System. They are two completely different things.”⁶³

52. As an industry-operated website, Realtor.ca is also constrained in the type of innovation it can offer: any innovation that benefits some brokers at the expense of others (e.g., showing multiple pictures or videos of a home if not all sell-side agents provide that information), or any innovation that appeals to some brokers but not others (e.g., showing a home's location on a map), is unlikely to be adopted.⁶⁴ This need for innovations to satisfy the majority of brokers – the need to meet a “least common denominator” requirement – can limit what types of services and innovations Realtor.ca offers.

53. Accordingly, in my opinion, Realtor.ca cannot be considered an acceptable alternative to VOW-based broker competition.

2. Discount brokers do not reduce the importance of VOWs' commission reductions

54. Dr. Flyer suggests that, because VOW-based brokers are not the only brokers that offer discounted commissions, VOWs are not unique and thus of no competitive significance.⁶⁵ Dr.

for example, for information on how Realtor.ca has updated the customer interface on their website. I also note that, in the United States, the counterpart to Realtor.ca (called Realtor.com) is believed by many to offer superior products and services as compared to Realtor.ca. Notably, Realtor.com must now compete for consumers' attention with the diverse and innovative VOWs that brokers in the United States can now offer in the wake of the 2008 USDOJ/NAR Consent Decree. This is consistent with the CREA observation above that “in the absence of other competitive forces, CREA has not been as aggressive in staying up to date with technology or the latest trends.” [CREA0000125.]

⁶³ William Harrington Speech to CRG Saskatoon, May 26, 2011 [CREA00038366 at '392, *emphasis* in the original] and Examination for Discovery of Gary Simonsen, April 5, 2012, at pages 208-209.

⁶⁴ Although I do not know the history of TREB with respect to these two types of innovations, I am aware that such innovations were resisted by at least some brokers in certain parts of the U.S.

⁶⁵ Flyer Report at ¶¶ 13 and 20.

Flyer fails to address the evidence that VOWs oftentimes not only offer lower commissions, but also offer services that consumers find to be at least as attractive (if not more so) than full-service traditional brokers.⁶⁶ Thus, he fails to address the question of whether, if lower-priced VOW-based brokers were unavailable, would consumers readily switch over to discount brokers offering significantly fewer services? If not, then the presence of discount brokers provides no basis to conclude that the loss of VOW-based brokers would not harm competition.

55. Equally important, Dr. Flyer overstates his argument in suggesting that the elimination of one class of low-priced competitors is competitively insignificant as long as there remains at least some other low-price competitors. Without some evidence as to the prevalence of those other low-priced brokers, the range of services they offer in comparison to VOWs, and the likely growth of VOWs in the future, there is no basis to conclude that the loss of VOWs offering reduced commissions would not harm consumers.

3. VOWs can help brokers achieve lower costs for a variety of reasons

56. Dr. Flyer observes that VOWs may not reduce the number of showings that a broker conducts. From this, he concludes that there is no reason to believe that VOWs help reduce brokers' costs. Dr. Flyer's conclusion should be rejected for several reasons.

- As noted in my June Report and acknowledged by Dr. Flyer, the evidence is mixed as to whether VOWs reduce the number of showings a broker conducts.
- Reducing the number of showings is only one way in which a broker can use VOWs to reduce their costs. As discussed in my June Report, brokers can also reduce their costs by allowing consumers to conduct searches and educate themselves about real estate markets through the use of a VOW, rather than requiring continuous interaction with the broker.⁶⁷ For example, rather than provide consumers with information pertaining to multiple searches as the consumer learns what neighborhoods they can afford, and what they should expect in different price ranges, consumers can educate themselves largely without broker interaction.
- Dr. Flyer suggests that different consumers may have different attributes and that this differentiation somehow limits VOWs' ability to reduce broker costs. Dr. Flyer offers no

⁶⁶ Many consumers (particularly those who find VOWs appealing) *prefer* conducting the search themselves without having to go through an agent as an information gatekeeper. As Don Richardson, TREB's CEO, agreed in his testimony, consumers are "interested in being in a position to do electronic searching on their own of the properties listed for sale." Examination for Discovery of Donald Richardson, March 19, 2012, at pages 134-135. See also Vistnes June Report at ¶¶ 71 and 189-196.

⁶⁷ See Vistnes June Report ¶¶ 49-53 and 184. See also McMullin (ViewPoint) at ¶8, Witness Statement of Shayan Hamidi (TheRedPin), June 22, 2012 at ¶¶ 45-47, and Witness Statement of Scott Nagel (Redfin), June 20, 2012 at ¶ 18.

evidence about this supposed consumer differentiation, and he provides no evidence indicating the magnitude or the dimensions of that differentiation. Finally, he offers no plausible explanation for why that supposed differentiation should limit a VOW's ability to lower broker costs by making a broker's interactions with those consumers – whatever their attributes – more efficient.

- Dr. Flyer suggests that, because brokers provide many different types of services to consumers, it is unreasonable to believe that VOWs will have a “dramatic” impact on brokers' costs.⁶⁸ Dr. Flyer never defines what he views as a “dramatic” impact on cost, provides no evidence suggesting that the cost savings are not significant, and provides no evidence countering the evidence I provided in my June Report indicating that these cost savings are likely to be significant.⁶⁹ Finally, Dr. Flyer offers no explanation for why several large VOWs have offered substantial commission reductions if, as Dr. Flyer asserts, those VOWs have not been able to realize significantly lower costs.

4. *Alternative means of evaluating home values are often very inaccurate*

57. Dr. Flyer suggests that, because VOWs are not the only way in which consumers can get information to value homes, VOWs are not unique and are thus not competitively significant. The one website that Dr. Flyer offers as a substitute that would be available to consumers in the GTA is Zoocasa.⁷⁰ Dr. Flyer's conclusion here is unwarranted. Although consumers can readily find web-based appraisals, this information is notoriously inaccurate.

- Zoocasa's own website cautions that its Zoopraisal estimates are only “a starting point in determining a home's price” and that Zoopraisal is not a substitute for “[g]etting a Comparative Market Analysis (CMA) from a licensed Real Estate Professional.”⁷¹
- Zoocasa's own website also advises that “[t]he Zoopraisal™ tool has been created to give consumers a *general* estimate on the price of a home. By entering in an address and some

⁶⁸ Flyer Report at ¶ 22.

⁶⁹ Vistnes June Report at ¶¶ 69-71 and 201-215.

⁷⁰ Flyer Report at ¶ 19.

⁷¹ <http://www.zoocasa.com/en/zoopraisal> (The Zoocasa website states that “Zoopraisal™ is Zoocasa's estimated market value, calculated using a proprietary formula, powered by Contract, a Brookfield Company. It's a starting point in determining a home's price based on similar properties in that area. Home values can be influenced by upgrades like granite countertops or other renovations. We encourage buyers, sellers, and homeowners to supplement Zoopraisal™ by additional research such as: - Contacting a licensed Real Estate Professional or Appraiser who is trained and certified to give you accurate value - Getting a Comparative Market Analysis (CMA) from a licensed Real Estate Professional - Scheduling to see the property in person[.]”) Other web-based appraisal services have similar warnings. For example, Zillow's website states “A Zestimate home valuation is Zillow's estimated market value. It is not an appraisal. Use it as a starting point to determine a home's value... We encourage buyers, sellers, and homeowners to supplement Zillow's information by doing other research such as: Getting a Comparative Market Analysis (CMA) from a real estate agent - Getting an appraisal from a professional appraiser - Visiting the house (whenever possible)[.]” [<http://www.zillow.com/howto/DataCoverageZestimateAccuracy.htm>.]

basic property attributes, the tool will calculate an estimated price based on similar properties in the neighbourhood.”⁷²

- In a recent Globe and Mail article, Keith Lancaster, the Chief Executive Officer of the Appraisal Institute of Canada, criticized the notion of web-based appraisals: “Much as a retail store blood pressure test is not a substitute for regular medical care, a web-based calculator [e.g., Zoopraisal] is no substitute for a real property appraisal...”⁷³
- According to the Wall Street Journal, “... when Zillow is bad, it can be terrible – off the mark by more than 25% on one in 10 homes... The median difference between the Zillow estimate and the actual price was 7.8%. (That was close to the 7.2% median ‘margin of error’ reported by Zillow itself on all transactions involving homes whose value it has estimated.)”⁷⁴
- Based on data published by Zillow, its Zestimate has an average median margin of error of 10%, meaning that half of its estimates are either more than 10% too high or 10% too low.⁷⁵ In the GTA, this level of error would mean that an estimated price for a typical \$500,000 home would be off by at least \$50,000 half of the time.

58. As a means of further testing the point that web-based appraisals are often very inaccurate, I looked at listings shown by ZipRealty in the Washington, D.C. area.⁷⁶ I found a startling divergence in appraisal estimates for most listings. For example, for one listing that ultimately sold for \$498,000, ZipRealty provided estimates from 3 different sources. These sources provided appraisals of \$466,629, \$383,624 and \$284,302. And while I have not undertaken a systematic study, this divergence in estimates is hardly unique among the listings I have examined.

⁷² Frequently Asked Questions at <http://www.zoocasa.com/en/zoopraisal#report>. Likewise, Zillow explicitly states that its Zestimate is not an appraisal. (According to FAQs on Zillow’s website: “Is a Zestimate an appraisal? No. The Zestimate is not an appraisal and you won’t be able to use it in place of an appraisal...”.) Zillow’s FAQs also note that its Zestimates are based on geographic areas that are “much larger” than a neighborhood (“Our estimating method differs from that of a comparative market analysis (CMA) done by real estate agents. Geographically, the data we use is much larger than your neighborhood. Often times, we use all the data in a county for calculation.”) [[http://www.zillow.com/wikipages/What-is-a-Zestimate/.](http://www.zillow.com/wikipages/What-is-a-Zestimate/)]

⁷³ [http://www.theglobeandmail.com/report-on-business/economy/housing/real-estate-appraisers-decry-zoocasa-calculator/article559190/.](http://www.theglobeandmail.com/report-on-business/economy/housing/real-estate-appraisers-decry-zoocasa-calculator/article559190/)

⁷⁴ “How Good Are Zillow’s Estimates,” Wall Street Journal, February 14, 2007.

⁷⁵ <http://www.zillow.com/howto/DataCoverageZestimateAccuracy.htm>.

⁷⁶ I was unable to perform a similar type of analysis in the GTA because Zoocasa does not provide multiple independent appraisals and its sole appraisal cannot be compared to the final sale price as is the case with ZipRealty. I have no reason to believe, however, that Zoocasa’s methodology for estimating home values is any more accurate than the methodologies used by the appraisers in the Washington, D.C. area.

IV. DR. CHURCH FAILS TO REBUT EVIDENCE THAT TREB'S POST-2011 CONDUCT WITH RESPECT TO PENDING SALES OR WEST LISTINGS REDUCED COMPETITION

59. Dr. Church acknowledges that there are several aspects of TREB's post-2011 conduct at issue. First, does TREB's withholding of WEST listings reduce competition? Second, does TREB's withholding of buyer commission information reduce competition? And third, does TREB's withholding of listings that are sold, or pending sold, reduce competition?⁷⁷

60. Dr. Church's report, however, is largely silent regarding the competitive effects of TREB's conduct regarding WEST listings and pending sold listings.⁷⁸ Dr. Church does not show that these excluded variables are not important, he does not show that these excluded variables can be otherwise obtained by brokers (or consumers), and he does not show that brokers and competition are harmed by their inability to use VOWs to provide that information to consumers. Thus, Dr. Church seemingly concedes a loss of competition associated with those aspects of TREB's conduct.

61. While discussed in my June Report, below I provide additional evidence that these excluded variables (WEST listings and pending solds) are both unavailable outside of TREB's MLS and that they are competitively significant.

A. WEST listings and pending sales are not available outside of TREB's MLS

62. Although Dr. Church argues that sold listings may be available outside of TREB's MLS, he provides no evidence that comprehensive information regarding either WEST listings or pending sales is available outside of TREB's MLS that would be a good substitute for TREB's MLS data. This is not surprising: there is no alternative source for this information.⁷⁹ In particular, comprehensive information is not available from any of the following sources:

⁷⁷ Although TREB withholds the entire sold listing from the VOW data feed (i.e., not just the sales price, but all characteristics of that listing such as the location, the number of bedrooms, the number of baths, the days on market, photographs, etc.), in several places Dr. Church appears to suggest that TREB is simply withholding one data element regarding those listings: the sales price. See, for example, Church Report at ¶ 179.

⁷⁸ See, for example Church Report at ¶ 159 in which he states that "[i]n subsequent sections, my discussion of the 'confidential price data' will focus on the sold price data, as there is a separate set of privacy, legal and regulatory concerns around WEST and pending listings." See also Church Report at ¶ 179 stating that "[i]n the remainder of this section, I focus on the 'sold price' element of the 'confidential price data,' and use the terms interchangeably, noting that the display and replication of data pertaining to WEST listings and pending listings may attract a further set of regulatory and privacy related concerns."

⁷⁹ This is not to say that there might not be some inferior sources of this information, e.g., newspapers may publish information about recently sold homes. If there exist some sources that provide information for an isolated number of listings, I am aware of no other source that provides comprehensive information.

- *Realtor.ca*. Realtor.ca does not make available *any* of the excluded data fields, including WEST listings or pending sales.
- *IDX sites*. IDXs cannot show *any* of the excluded data fields, including WEST listings or pending sales.
- *Broker websites*. Although broker websites might, in principle, show WEST listings and pending sales for their own listings, they would be unable to show this information for other brokers' listings. Thus, even the largest of the GTA's franchise brokerages (Brokerage E) would be unable to show this information in approximately 70 percent of cases, thus severely limiting the amount of information it could provide to consumers. This lack of comprehensiveness would be even more problematic for other brokerages that have access to information to an even smaller share of listings in the GTA.
- *Teranet or Municipal Property Assessment Corp. (MPAC)*. Although Teranet and MPAC have access to certain data regarding homes after they sell, they do not have data about homes that are pulled off the market (i.e., WEST listings). Similarly, Teranet and MPAC have no access to information about pending home sales.

B. WEST listings and pending sales provide valuable information

63. In addition to the evidence previously identified in my June Report, I have conducted additional analyses that show the importance of WEST listings and pending sales. First, I show that pending sales are important to consumers because they provide the most up-to-date information. I then show that these WEST listings and pending sales are an important part of the information that consumers rely upon when trying to assess market valuations.

1. Pending sales provide important up-to-date information

64. Information about pending sales provides consumers with the most up-to-date information about market activity. Having "fresh" data is particularly important when home prices are changing significantly over time. Information regarding "pending sales" constitutes some of the "freshest" information available.⁸⁰ My analysis of TREB MLS data shows that the median time that a home spends as a "pending sale" is over 7 weeks.⁸¹ It follows that preventing consumers from readily accessing information about pending sales forces consumers to look at the market with a lag of almost 2 months.

⁸⁰ When I refer to pending sales, I refer to properties where the buyer and seller have signed a contract but where the closing (i.e., transfer of title) has not occurred. TREB's CEO Donald Richardson further distinguishes this category of listings into "sold conditionals" and "pending solds." (Richardson (TREB) Statement at ¶¶ 44-46) For the purposes of my analyses, I do not make this distinction: "pending solds" include both of Richardson's two categories.

⁸¹ Vistnes June Report ¶ 256.

65. A two month lag in information can significantly distort consumers' perception of the market. Between June 2010 and June 2011, market prices in the GTA have increased at an average annual rate of about 10 percent.⁸² Thus, prices in any given two month period increased approximately 1.5 percent, on average, across the GTA.⁸³

66. Although some reports exist that provide up-to-date information on pricing trends, statistics in which information is aggregated across a variety of different properties can be misleading: prices can go up or down over time because of a change in what kinds of homes are selling rather than because of any true shift in the market.⁸⁴ Thus, aggregated market reports are poor substitutes for information about individual listings.

67. To assess the extent to which home prices in a given community changed over time, controlling for the characteristics of the home, I used the same approach that Dr. Church relies upon in order to estimate the relationship between home characteristics and price controlling for time.⁸⁵ That analysis provides the following findings:

- Controlling for home characteristics, home prices across the entire GTA increased (on average) by 1.4 percent during any two-month period in 2011.
- The magnitude by which home prices changed in a two month period varied by community: in some communities, home prices rose while in other communities prices fell. This significant variation in home prices across areas is further confirmed by TREB's own analyses in which it estimates price changes across areas controlling for

⁸² The median price increased from about \$370,000 to approximately \$410,000 between June 2010 and June 2011.

⁸³ The rate of price changes can vary significantly across different regions in the GTA: for example, while prices in Mississauga declined by about 3.5 percent in the June-October 2011 time period, prices were essentially flat in the Toronto area. Thus, even if a consumer knows that prices in the overall GTA are increasing, that does not tell the consumer how prices in a particular area in which they are interested are changing.

⁸⁴ TREB is well aware of these difficulties, which prompted TREB to introduce "a new system to measure and provide clarity on home prices and home price growth: the MLS® Home Price Index (MLS® HPI)." (See "GTA REALTORS® Introduce MLS® Home Price Index," available at http://www.torontorealestateboard.com/market_news/release_market_updates/news2012/nr_HPI_announcement_0212.htm.) According to TREB, "the MLS® HPI approach provides a less volatile measure of price than averages and medians, which can swing dramatically in response to changes in the mix of home sales from one time period to the next. ... It is often difficult to determine if average or median price fluctuations really reflect changes in buyers' willingness to pay for certain housing attributes, or just changes in the volume of very expensive or inexpensive home sales from one time period to the next. The MLS® HPI removes that uncertainty."

⁸⁵ This is very similar to the hedonic regression approach that Dr. Church uses in his report to estimate home values. See Church Report at ¶ 216. While I use Dr. Church's approach here to illustrate the implications of his approach, I have reservations about the underlying validity of that methodology. I also note that buyers, sellers, and their agents likely have information that is not included in the econometric model. In that case, at least some of the price variation across areas in the GTA may not represent uncertainty to these local players.

home characteristics: see Exhibit B.⁸⁶ Thus, knowledge of overall price trends in the GTA is insufficient to know how prices are changing in a particular community.

- Information about pending sales helps predict prices. Using a technique similar to the technique relied upon by Dr. Church, I estimated the determinants of home sales prices. I then tested whether variables reflecting prices for pending sales were statistically significant. As shown in Exhibit C, I found that this information was statistically significant. Thus, having information about pending sales can result in significantly different estimates about home values compared to the case where that pending sales information is missing.

68. This analysis showing that up-to-date information is important is hardly surprising, with market participants providing confirmation of the point:

“The timeliness of information matters to Realtors and their customers. Real estate markets can change almost overnight. Realtors need up-to-date information to advise their clients about what the market is like at that moment. Even a 5% price drop is a \$40,000 swing price on an \$800,000 home. Because of the money on the line, sellers and buyers want to know what the market is like today, not several months ago (when prices might have been higher or lower) Knowing that a comparable house down the street sold last week for \$500,000 is more useful to sellers and buyers than knowing that another comparable nearby house sold for \$500,000 six months ago.”⁸⁷

2. WEST listings and pending sales make up a substantial share of the available “comps”

69. WEST listings and pendings sales make up a large share of all listings that a consumer is likely to consider when trying to estimate home values. To quantify just how much information a consumer would fail to see if their CMA excluded WEST listings and pending sales, I conducted the following analysis. I took the perspective of a consumer that, on March 1, 2012, was interested in assessing home values in a particular community. Using MLS data, I determined which listings in that community this consumer could review as part of a CMA. In doing this, I assumed that the consumer would look at all past sales within the last six months, all WEST listings within the last six months, and all sales that were pending as of March 1, but not yet

⁸⁶ See http://www.torontorealestateboard.com/market_news/release_market_updates/news2012/nr_HPI_announcement_0212.htm) Exhibit B also shows how one-month price changes can signal important changes in trends relative to six-month time trends, thus further emphasizing the potential importance of the most recent information. The magnitude of price changes may also vary by house type within the same community. For example, TREB estimated that in Halton, January 2012 prices increased by 1.08 percent across all house types, but that they increased by 1.14 percent for single family homes and declined by 0.54 percent for townhouses.

⁸⁷ Reply Witness Statement of Mark Enchin (Realty Executives Plus), August 17, 2012 at ¶ 8 (hereafter, “Enchin (Realty Executives Plus) Reply Statement”).

closed.⁸⁸ I then asked what share of those listings the consumer could no longer consider if WEST listings and pending sales were no longer available.

70. My analysis shows that averaged across the top 100 communities,⁸⁹ consumers would lose information on approximately 46 percent of listings that they would otherwise be able to consider. As shown in Exhibit D, this impact can differ significantly across communities: in a number of communities, consumers would lose access to over 60 percent of all listings.⁹⁰

V. DR. CHURCH FAILS TO REBUT EVIDENCE THAT TREB'S POST-2011 CONDUCT WITH RESPECT TO SOLD LISTINGS SUBSTANTIALLY REDUCES COMPETITION

71. Although Dr. Church indicates in several places that his analysis of TREB's conduct is based on an essential facilities framework,⁹¹ the relevant economic issues in this case are not about whether one set of firms should be required to provide their competitors with access to their own "facilities." Indeed, the information at issue is information that brokers already routinely provide to their customers. Thus, there is no question about whether all TREB members are entitled to access that information or whether their customers are entitled to view that information. Rather, the question is whether TREB should impose rules that discriminate between how different brokers can compete by restricting the manner in which brokers are allowed to provide the information to their customers. In particular, can brokers use the innovative web-based VOWs that customers have shown a clear desire to use, or must brokers instead continue to use more traditional, but more burdensome and less efficient, means of providing that very same information to customers, e.g., to deliver that information over fax lines, in person, over the telephone, or via email?

72. As noted in Section II.E, the economic issues in assessing whether TREB's post-2011 conduct substantially reduced competition are the following:

- Is there a relevant antitrust market that TREB controls and in which TREB has substantial market power (i.e., it is "dominant")?

⁸⁸ I used the "date of last update" to identify past sales and WEST listings in the last six months. I also cleaned the data sample to eliminate duplicates arising because the same home might appear in the MLS database multiple times in that six-month period.

⁸⁹ A "community" in the MLS database is generally a small geographic area, frequently corresponding to a neighborhood.

⁹⁰ I also considered the impact of losing WEST and pending sold listings if consumers look further back than six months when looking at comparables. Although the share of WEST and pending sold listings generally falls the further back in time one looks, even for 12-month and 18-month look-backs the share of WEST and pending sold listings remains significant.

⁹¹ Church Report at ¶¶ 19, 168-170, 259 and 286.

- If TREB enacts discriminatory rules prohibiting brokers from using VOWs to make MLS sold listings information available to their customers, can brokers find alternative sources providing comparable information without incurring significantly increased costs?
- If brokers cannot readily substitute to an alternative source of information regarding sold listings, does this harm VOW-based brokers by reducing the attractiveness of the services they offer to their customers? If TREB's conduct harms competing brokers by preventing brokers from using VOWs to provide sold information to their customers, does that reduce competition among brokers?
- Whatever the current level of competition among brokers, would the elimination of TREB's restrictions increase dynamic competition with the result that consumers benefit from the provision of even more innovative, desirable brokerage services than is currently the case, at possibly even lower prices?
- Is competition in real estate markets distorted by principal-agent problems, and is TREB's conduct preventing VOWs from reducing those problems, thus raising prices and harming consumers by distorting competition?

73. I show below that, with respect to each one of these issues, Dr. Church fails to rebut the evidence that TREB's conduct has had, and continues to have, the effect of substantially reducing competition.

A. TREB controls the relevant markets of buy- and sell-side real estate services

74. As discussed in Section II.C above, TREB controls the markets for buy-side and sell-side real estate services. This control allows TREB to impose discriminatory restrictions on how brokers can compete, and has had the effect of maintaining prices above, and service and innovation levels below, the competitive levels that would have emerged in the but-for world in which TREB did not impose those discriminatory restrictions.

75. Dr. Church appears to recognize that real estate services constitute a relevant antitrust market, yet he fails to rebut the evidence that TREB controls that market (or markets).

1. The relevant markets in which TREB is dominant

76. The relevant markets in which TREB is dominant are the markets for buy-side and sell-side real estate services providing MLS accessibility.

a) *Real estate services providing MLS accessibility meet the requirements of a relevant market*

77. As discussed in my June Report, there is no evidence that buyers would substitute in any significant number from real estate brokers offering buy-side services (including MLS access) to some other provider.⁹² This lack of substitution means that a hypothetical monopolist of such buy-side real estate services would choose to impose a small but significant and non-transitory increase in price (SSNIP) relative to existing price levels.⁹³ Similarly, I see no evidence that sellers would substitute in any significant number from real estate brokers offering sell-side services (including MLS access) to some other provider.⁹⁴ This lack of substitution means that a hypothetical monopolist of such sell-side real estate services would choose to impose a SSNIP relative to existing price levels. Thus, the markets for buy-side and sell-side real estate services meet SSNIP-test criteria (sometimes referred to as the “hypothetical monopolist” criteria) for market definition.⁹⁵

78. Defining the relevant markets as buy-side and sell-side markets for real estate services appropriately focuses the analysis of TREB’s conduct on where the harm is likely to occur. The allegations here are that TREB’s conduct affects the manner in which brokers can compete for customers and that the resulting reduction in competition harms consumers by denying them the lower prices, and higher quality of services, that would have emerged but for TREB’s conduct. There is no evidence that services offered by other types of professionals are relevant to this inquiry, nor is there any evidence that the impact of TREB’s discriminatory restrictions on how real estate brokers can compete is affected by other substitution possibilities available to consumers seeking to buy or sell a home.

79. In contrast, Dr. Church suggests that the market definition exercise should focus on whether there exists a market for confidential real estate data.⁹⁶ While an inquiry into consumers’ or brokers’ ability to find alternative sources for the MLS information that TREB prohibits brokers from showing on their VOWs is a relevant part of the competitive effects inquiry (see Section V below), it does not help the analysis to suggest that the relevant market at issue in this case is the market for confidential information rather than the market for real estate services.

⁹² Vistnes June Report at ¶¶ 88-91, 96, and 102-109.

⁹³ This lack of substitution means that, even without detailed broker cost data, one can confidently predict that the price increase would be profitable.

⁹⁴ Vistnes June Report at ¶¶ 88-91, 96-103, and 108-109.

⁹⁵ It is well recognized that the application of the SSNIP test cannot always be done with precise rigor and data specificity. (See, for example, Baker, J., “Market Definition: An Analytical Overview,” *Antitrust Law Journal*, 2007, pages 129-173.) The SSNIP test can nevertheless provide a useful framework for evaluating market definition and provide useful baselines for how much substitution is necessary when defining markets. Ultimately, however, one needs to recognize that market definition is merely a *means* towards the ultimate inquiry of whether TREB’s conduct reduced competition, not a goal unto itself.

⁹⁶ Church Report at ¶¶ 8-11 and 201-206.

There is no allegation that TREB's conduct is having any effect in some market for confidential information (even if one assumed that such a market existed), and no allegation that TREB's market power is being used to maintain prices or market power in that "market for confidential information." Thus, by focusing on a "market for confidential information," one loses sight of the more important inquiry: does TREB's conduct reduce competition among brokers relative to the but-for world? For that inquiry, one needs to focus on the market for buy-side and sell-side real estate services.

b) Dr. Church appears to acknowledge that real estate services constitute a relevant market

80. In my June Report, I present evidence that buy-side and sell-side real estate services providing MLS access constitute relevant antitrust markets.⁹⁷ Dr. Church seemingly acknowledges the relevance of these markets.⁹⁸

- Dr. Church devotes a considerable portion of his report to calculating market shares and concentration (HHIs) relating to real estate service markets.⁹⁹ Market share and HHI calculations, however, are of no value unless calculated in the context of a properly defined antitrust market.¹⁰⁰ Thus, the emphasis that Dr. Church attaches to these analyses speaks to his implicit recognition that real estate services constitute a relevant antitrust market.¹⁰¹
- The Church Report is replete with discussion and references that either refer to a real estate services market or that only make sense in the context of such a market.
 - Dr. Church refers to "entry barriers" into the real estate profession and discusses "the nature of free entry and easy exit in residential real estate brokerage in the GTA."¹⁰² The concept of entry and exit, however, only makes sense if the real estate profession constitutes a market.

⁹⁷ See Vistnes June Report at ¶¶ 85-109.

⁹⁸ I note, however, that Dr. Church fails to recognize the importance of demand-side considerations in defining relevant antitrust markets and thus suggests that there is no distinction between buy-side and sell-side brokerage markets. Dr. Church also fails to address the point that brokerage services are significantly differentiated according to whether the broker can offer customers access to MLS services.

⁹⁹ See Church Report at ¶¶ 117-123 and 131-135.

¹⁰⁰ See, for example, Church Report at ¶ 184: "Proper market definition enables market shares and statistics on concentration to be used as proxies for market power."

¹⁰¹ Although Dr. Church considers whether the competitors in that market should be defined at the level of a franchise brokerage, an individual brokerage, or an individual agent, none of that discussion or analysis suggests that the relevant market is anything but the provision of real estate services.

¹⁰² Church Report at ¶¶ 83 and 113.

- Dr. Church discusses whether agents and brokers “earn monopoly profits or exercise market power” and how “entrants” will evaluate “the profit-maximizing mix of price and non-price competition.”¹⁰³ This discussion only makes sense in the context of a real estate services market in which agents and brokers compete.
- Dr. Church refers to “competition among agents to supply brokerage services” and discusses “the extent of competition in residential real estate brokerage in the GTA.”¹⁰⁴ Similarly, Dr. Church discusses how “[t]he agent level is arguably the level that is most appropriate for analyzing the extent of competition,” presumably referring to competition among agents.¹⁰⁵
- Dr. Church refers to concentration in the “brokerage business.”¹⁰⁶ Concentration, however, must be in the context of some market – presumably what Dr. Church views as the “brokerage business.”

c) Dr. Church fails to show that real estate service markets should be more broadly defined

81. Dr. Church suggests that the real estate brokerage market should also include For Sale By Owner (FSBO), new construction, and even rentals. If Dr. Church means to imply that consumers are willing to substitute between brokerage services and the property the consumer is looking to buy or sell, then he fails to provide any evidence suggesting that broker *services* and housing *properties* are close substitutes or that there would be any substitution.¹⁰⁷

82. Alternatively, it may be that Dr. Church believes that FSBOs, new construction and rentals are competitively significant in the following way. In principle, a small but significant increase in broker commission prices might induce a significant number of home buyers to decide not to buy a home listed on the MLS and pay for the services of a broker, but to instead avoid that increased commission price by substituting to new construction or to a rental property that did not involve the use of broker services.¹⁰⁸ The hypothetical increase in the commission price is small relative to what buyers may see as requiring them to substitute to a very different type of home (new construction or a rental): for a \$500,000 home, the buy-side commission price would likely increase by approximately \$625, i.e., 0.1 percent of the total purchase price of the

¹⁰³ Church Report at ¶ 86.

¹⁰⁴ Church Report at ¶¶ 89 and 121.

¹⁰⁵ Church Report at ¶ 147.

¹⁰⁶ Church Report at ¶ 134.

¹⁰⁷ One might ask if buyers would substitute from using a broker to buying or selling using the FSBO approach, and thus substituting to “self-service.” This was the perspective I took in my June Report when I argued that such substitution was unlikely.

¹⁰⁸ This interpretation of Dr. Church’s argument becomes more complicated and difficult to imagine when considering how a small commission price increase would result in substitution from a home *seller’s* perspective.

home.¹⁰⁹ And Dr. Church provides no evidence suggesting that the substitution he believes would occur in the event of that 0.1 percent overall home price increase is likely to be significant.

d) TREB dominance does not depend on whether there is a market for “confidential data”

83. While appearing to implicitly acknowledge that real estate services constitute a relevant market, Dr. Church argues that a different relevant market must be considered when assessing dominance: the market for what Dr. Church refers to as “confidential information.”¹¹⁰ But, while asking about brokers’ ability to access TREB’s confidential information from other sources, and asking about how much value consumers place on accessing that confidential information through a VOW are important aspects of the competitive effects analysis, those questions are not part of the more direct inquiry into whether there exists a relevant market in which TREB is dominant and in which TREB’s conduct likely resulted in higher prices, or less service or innovation, than would have otherwise been the case.¹¹¹

84. Put differently, even if Dr. Church were able to demonstrate that there exists a market for “confidential information” in which TREB is not dominant, that does not mean that TREB is not dominant in the market for buy- and sell-side real estate services.¹¹²

B. Brokers cannot mitigate TREB’s prohibitions by acquiring data elsewhere

85. Dr. Church argues that TREB’s prohibition is unlikely to reduce competition because he believes that “the ‘excluded’ data and any other derivative analyses that the VOW operators hope to provide can be provided *in exactly the same fashion* as other brokers can provide these analyses.”¹¹³ Thus, Dr. Church claims that brokers can readily obtain comparable information

¹⁰⁹ This example assumes a buy-side commission of 2.5 percent, and a commission price increase of 5 percent. In that case, the buy-side commission increases from \$12,500 to \$13,125. This \$625 is 0.13 percent of the total purchase price of \$500,000.

¹¹⁰ Notably, in contrast to the considerable attention that Dr. Church provides to estimating market shares and HHIs in the market for real estate services, Dr. Church provides no estimates of market shares or concentration in his alleged market for confidential data.

¹¹¹ Dr. Church’s questions are not ignored, but are more properly addressed in the competitive effects portion of the economic inquiry rather than as part of the market definition inquiry.

¹¹² In contrast, Dr. Church seems to believe that TREB’s dominance must be in the specific market that he defines as the market for confidential information, claiming that “it is irrelevant if TREB has control over residential real estate brokerage services because it controls the terms of access to its MLS system.” [Church Report at ¶ 9.]

¹¹³ Church Report at ¶ 263.

from other sources, and thus distribute that information to consumers without violating TREB's rules.¹¹⁴

86. In considering whether alternative sources for sold listings information are comparable to the MLS sold listings information that TREB prohibits brokers from providing to their customers through VOWs (but allows brokers to provide to their customers through other means such as faxes, letters, or in person), it is important to consider several dimensions of comparability including:

- *Brokers' access to the data.* Even if some other firm has the data at issue, will that firm be willing to provide the data to brokers for use on a VOW?
- *Timeliness and reliability of the data.* Alternative data sources may be unreliable, a critical issue according to both TREB and CREA. As Simonsen, CREA's CEO, states, "The importance of data quality cannot be overemphasized The failure of a website to contain updated and accurate data creates the risk of negative consumer perception of the MLS listing data and the services provided by Realtors." Simonsen also notes, that there has been "a significant problem with the accuracy and currency of the MLS listing information being shown on third party websites As a result, the internet was inundated with inaccurate and out of date listing information."¹¹⁵
- *Comprehensiveness of the data.* In assessing the ability of brokers to turn to alternative data suppliers, one needs to consider whether those alternatives offer comprehensive information regarding sold listings, or instead are limited to offering individual data elements, e.g., they offer information regarding the sales price of a home but not information about the home's characteristics (number of bedrooms, baths, type of construction), photos or other information that consumers find useful in valuing homes.
- *Cost of accessing the data.* If brokers need to pay an alternative data supplier for the data that they could otherwise obtain for free from TREB's MLS system, then brokers cannot costlessly substitute. The greater those costs of purchasing data (and then integrating those data into the other MLS data they have from TREB), the less viable those alternative data suppliers become.

87. As discussed below, Dr. Church fails to consider these factors, much less provide evidence that his proposed alternative data sources are comparable to the MLS in the important

¹¹⁴ See Church Report at ¶¶ 11 and 18.

¹¹⁵ Simonsen (CREA) Statement at ¶¶ 51 and 60.

dimensions identified above.¹¹⁶ In fact, the evidence shows that each one of the alternative data sources that Dr. Church proffers might serve as an alternative source of “sold listings information” fails on one or more of these dimensions. Accordingly, Dr. Church’s suggestion that brokers can readily access and provide their customers with sold listings information from other sources is without basis. I further show that there is no evidence of broker willingness to substitute to the alternative data sources identified by Dr. Church.

1. Dr. Church’s proposed alternatives are not close substitutes

88. Dr. Church identifies five “potential” alternative suppliers of sold data for VOWs: Teranet, MPAC, brokers’ own listings, FSBO sites, and appraisers.¹¹⁷ Yet, despite his assertions regarding these potential suppliers, Dr. Church fails to provide any real evidence indicating that brokers could turn to these (or any other) sources to replicate the kind of comprehensive sold data that is already available through TREB’s MLS. Dr. Church also fails to consider what additional costs brokers would incur to try to incorporate data from those other sources into their VOWs. Thus, Dr. Church provides no real evidence that his supposed alternatives for sold listings data are, in fact, viable substitutes to the data that would otherwise be available through the MLS.

89. In fact, there appears to be no real evidence that these supposed substitutes are in fact viable substitutes, a point that Dr. Church seemingly acknowledges at one point when he states that the “commercial supply [of confidential data] does not exist...” and that “[t]here is not yet a well-developed market for the confidential data.”¹¹⁸ These are important admissions that severely undermine Dr. Church’s assertions. As discussed below, Dr. Church’s claim that sold data are available elsewhere is also contradicted by significant other evidence.

a) Teranet/GeoWarehouse

90. Teranet is a for-profit company that owns and operates Ontario’s Electronic Land Registration System on behalf of the Province. Among other things, Teranet offers a service called GeoWarehouse that provides access to certain data contained in the Land Registry System, including the sold price of real estate transfers in Ontario.¹¹⁹

¹¹⁶ Dr. Church asserts, for example: “VOW operators potentially *could have* access to other sources that provide the confidential price data; a more significant competitive supply of such data *could develop* if there were demand for it, and firms *could profitably* enter the market.” [Church Report at ¶ 269, *emphasis added*.]

¹¹⁷ Church Report at ¶¶ 211 and 256.

¹¹⁸ Church Report at ¶¶ 223 and 256.

¹¹⁹ Teranet has *no* information regarding WEST listings, pending sales, or the commission offered to the buy-side agent.

91. Dr. Church provides no independent evidence that Teranet is a possible alternative for brokers to provide information about sold listings on their VOWs.¹²⁰ In particular, he offers no evidence regarding any of the following considerations, all of which are economically relevant to understanding if Teranet is likely to be a real substitute for the sold listings information in TREB's MLS.

- *Comprehensiveness of Teranet data.* Sales price is not the only useful information in sold listings. Although Teranet has data regarding the sold price for homes, Teranet does not appear to have the same comprehensive information about sold homes that appears in the MLS (e.g., interior photos of the home, days on market, original price, and price changes).

In assessing the comprehensiveness of Teranet's data on sold listings and brokers' ability to rely on those data instead of TREB's MLS, it is important to recognize that TREB currently appears to view Teranet's data as a *complement* to its MLS data, *not a substitute*. In particular, if Teranet's GeoWarehouse were providing the same information that is already available in TREB's MLS, there would be no reason for TREB to contract with Teranet to gain access to information it already has. Thus, TREB's willingness to contract with Teranet for GeoWarehouse data suggests that there must be important differences between those datasets.¹²¹

¹²⁰ Dr. Church's support appears to be limited to a statement from TREB's CEO (Richardson) that "sold information is available to VOW operators through other sources such as Teranet and MPAC, and VOW operators are free to negotiate service agreements with these vendors for use in a VOW." [Church Report at ¶ 211.]

¹²¹ My understanding is that these differences likely pertain to sold properties that were never included in the MLS, e.g., new condominium sales, as well as certain demographic and tax assessment data. For example, Bill Johnston, a former President of TREB states that "Once listings that appear to you are identified, your REALTOR can compare asking prices to sold prices using the MLS. They can monitor other factors as well, like price changes and the number of days it has been on the market, to help you determine the best time to take action. Working with a REALTOR to buy or sell a property provides your REALTOR the opportunity to put to use a number of other important databases, like Terant's land registry system, which can even provide information on the sold prices of properties not listed on the MLS." ["Search for a Home Can Be Challenging," TREB President's Column as it Appears in the Toronto Star, Bill Johnston, President of the Toronto Real Estate Board, April 8, 2011.] See also, "For the Buyer," Bill Johnston, August 26, 2010 and "There's No Investment Like a Home," TREB President's Column as it Appears in the Toronto Star, Bill Johnston, President of the Toronto Real Estate Board, July 16, 2010. Brokers also use Teranet to supplement – not substitute – other information in the MLS, such as demographic data. As Tom Lebour, another former President of TREB, states "Your realtor will for example, learn how to use the Multiple Listing Service which can generate information on sales volumes, average prices, and days on market, by housing type and neighbourhood, that will help you determine a suitable offer or listing price... To confirm a number of specifics that are important to every transaction like current taxes on individual properties, ownership histories and lot size details, your REALTOR can also access the Municipal Property Assessment Corporation's database. They may extend their information gathering even further, retrieving data like streetscape imagery, mapped neighbourhood sales and average local incomes from Teranet's GeoWarehouse." ["REALTORS Need to Know Quite a Lot," Tom LeBour, President of TREB, Toronto Star, May 28, 2010.]

- *Willingness of Teranet to provide data.* Dr. Church assumes that brokers could readily access Teranet data for use on their VOW websites. This assumption appears to conflict with the evidence.
 - Teranet does not currently allow its data to be shown on brokers’ VOWs. As Dr. Church notes, the sold data that Teranet provides to TREB for its member brokers’ use cannot be “republished,” and thus, brokers cannot show that information on their VOWs.¹²²
 - Teranet may be unwilling to enter into new contracts with brokers that would allow “republishing” on brokers’ VOWs. [REDACTED]¹²³
This relationship may leave Teranet reluctant to make sold listings available for brokers’ use on VOWs if that action would antagonize TREB.
 - Teranet has demonstrated an unwillingness to enter into new agreements to provide comprehensive sold data to others. As indicated in the Reply Statement of Mark Enchin, Teranet left “the clear impression that they were very reluctant to sell me this information.”¹²⁴ I also understand that Teranet has not made this sold listings information available to others in the real estate industry such as ZooCasa, even though such data would likely be quite valuable to ZooCasa.¹²⁵
- *Cost of accessing Teranet data.* Sold listings are currently part of the MLS data, and thus brokers incur no incremental costs to access that information. If brokers need to turn to Teranet for that same information, they would likely incur additional costs. Yet, while Dr. Church recognizes that brokers would incur such costs, he does not attempt to quantify the likely magnitude of those costs.¹²⁶

The evidence suggests that brokers might incur substantial costs in order to gain access to Teranet’s sold data. [REDACTED]

[REDACTED]¹²⁷ Although one could speculate that individual brokers might be able to negotiate lower rates, one could equally speculate that individual buyers without the same negotiating clout as

¹²² Church Report at ¶ 213.

¹²³ “Annual General Meeting Script, The Toronto Real Estate Board General Meeting Script, Version 11,” May 6, 2009, at pages 18-19 (TREB00018082).

¹²⁴ Enchin (Realty Executives Plus) Reply Statement at ¶ 11.

¹²⁵ Zoocasa offers consumers an Internet-based tool called a “Zoopraisal” which Zoocasa claims can be used as a “starting point” for determining the price of a home. Zoocasa indicates that it acquires its data from Centract, an appraisal company that assesses homes for financial services firms. [<http://www.zoocasa.com/en/zoopraisal>.]

¹²⁶ Church Report at ¶ 327, noting that “[w]hile the sold price is available at Teranet, Teranet controls (through its licensing agreements) how those data are used and there is currently a marginal cost...”

¹²⁷ [REDACTED]

TREB would face even higher rates.¹²⁸ Between these, the evidence suggests that Teranet would charge individual brokers a very high price: when one broker (Mark Enchin) sought to obtain just one or two data fields from Teranet (i.e., much less data than the MLS's comprehensive data fields on sold listings), Teranet quoted him a price of as much as \$5 per property.¹²⁹ Thus, populating a VOW with information on approximately 7,500 new sold listings per month would cost approximately \$37,500 (or about \$450,000 per year).¹³⁰

- *Timeliness and reliability of Teranet data.* Teranet's sold pricing data is approximately two months old before it becomes available on GeoWarehouse. This delay between the date when a home is sold and when it would be available on GeoWarehouse reflects not only a median lag time of over 7 weeks from when a home is sold and when the contract closes, but also an additional 10 to 14 days before the data Teranet receives is available to users of GeoWarehouse.¹³¹ This lag is problematic: as noted by broker Mark Enchin, who is developing a new VOW in the GTA, "Other sources of information, such as Teranet, were not as up-to-date and therefore did not as accurately reflect current market conditions as the pending sold information in the MLS did."¹³²
- *Ability to integrate Teranet data into VOWs.* Even if Teranet had comprehensive sold data that it was willing to provide at a minimal cost, brokers would still face costs of integrating those data into their VOW. It is also unclear if Teranet is capable (or willing) to provide the type of real-time data feed that brokers seek for their VOWs. My understanding is that Teranet's principal data product (GeoWarehouse) is a static report that a broker could not readily incorporate as a data feed into their VOW. Thus, brokers would either have to incur the costs of inputting data from the report into their VOW, or Teranet would have to incur costs in order to provide a more VOW-friendly data feed.

¹²⁸ At an annual TREB meeting, Pauline Aunger, the President of Ontario Real Estate Association thanked TREB for using its collective buying power to negotiate lower Teranet prices on behalf of all real estate agents in Ontario: "I would also like to acknowledge and thank the Toronto Real Estate Board for another contribution to all REALTORS of Ontario. You made a major effort this past year to negotiate a money-saving deal with Teranet. You did this not only on behalf of your own members but also on behalf of all Ontario REALTORS." ["Annual General Meeting Script, The Toronto Real Estate Board General Meeting Script, Version 11," May 6, 2009.]

¹²⁹ Enchin (Realty Executives Plus) Reply Statement at ¶ 11. See also Enchin Statement at ¶ 15 where he states, "Teranet was also a costly and less efficient source of the data than the MLS."

¹³⁰ Count of sold listings reported in a recent TREB publication titled "Historic Statistics – Toronto MLS Sales and Average Price" [http://www.torontorealestateboard.com/market_news/market_watch/historic_stats/pdf/TREB_historic_statistics.pdf.]

¹³¹

¹³² Enchin (Realty Executives Plus) Statement at ¶15.

92. For all of these reasons, Teranet does not appear to be a good substitute to TREB's MLS for information regarding sold listings. This is consistent with several witness statements provided in this matter:

- As stated by Mark Enchin from Realty Executives Plus:

“[i]n my experience, Teranet and MPAC provide sales prices of residential properties which are not as up to date and therefore not as useful to Realtors and their customers as data in a board's MLS database I use Teranet's GeoWarehouse primarily to confirm client's ownership of a property and to find out information about mortgages and liens. I rarely get sold information from it.”¹³³

- Despite Dr. Church's opinion that Teranet and MPAC can provide comparable data, William McMullin of Viewpoint stated that they could not compete in the GTA without access to MLS data:

“ViewPoint would like to offer our web-centred brokerage model in Toronto, as part of our expansion from Nova Scotia into key markets across Canada. At this time, we cannot do so in Toronto in a commercially viable way, due to TREB's VOW Policy and Rules and the lack of content in the VOW data feed offered by TREB to its members. Specifically, we need data about properties that have sold (including recently sold properties) and other data such as price changes that are provided in 'real time', in order to compete effectively using our brokerage model.”¹³⁴

Mr. McMullin further stated that:

“ViewPoint's business model is based on access to and use of a comprehensive data feed from an MLS, which is not provided by TREB at this time, and on being able to be innovative in the presentation of that and other data to consumers (and/or customers) on our website (which we could do with the appropriate data feed). Our business is essentially excluded due to the absence of the sold and pending sold data in the feed. *There is no other comprehensive source of residential properties for sale and sold in the Toronto area.*”¹³⁵

b) Municipal Property Assessment Corporation (MPAC)

93. Dr. Church argues that brokers can turn to MPAC as a substitute source of data for sold listings. MPAC is a non-share, not-for-profit corporation whose primary mission is to prepare annual assessment rolls and provide property assessments for nearly 5 million properties in Ontario. It also collects information for the purposes of preparing provincial jury lists, school

¹³³ Enchin (Realty Executives Plus) Reply Statement at ¶¶ 7-9. Similarly, in his original witness state Enchin stated that “Other sources of information, such as Teranet, were not as up-to-date and therefore did not as accurately reflect current market conditions as the pending sold information in the MLS did. Teranet was also a costly and less efficient source of the data than the MLS. These disadvantages of data from Teranet remain the case today.” [Enchin (Realty Executives Plus) Statement at ¶ 15.]

¹³⁴ McMullin (ViewPoint) Statement at ¶ 10.

¹³⁵ McMullin (ViewPoint) Statement at ¶ 104 (*emphasis added*).

support lists, and preliminary lists of electors for municipalities. As a part of its mission, MPAC offers a service called Propertyline which includes the ability to purchase reports that include price data for sold properties in Ontario. It is my understanding that the sold price data reported in Propertyline is actually provided by Teranet as part of a license between Teranet and MPAC, and as part of the agreement MPAC is obligated to pay Teranet a royalty for any non-statutory products it commercializes that rely on these sold data.¹³⁶

94. As with Teranet, Dr. Church provides virtually no specifics to support his claim that MPAC could serve as a viable substitute for brokers. In particular, he offers no evidence that MPAC can provide comprehensive information, that it would be willing to provide such data, that it would be willing to provide the data at a price brokers pay for the same information from the MLS (i.e., free), or that the data would be timely, reliable and capable of being integrated into brokers' VOWs. Most importantly, because much of MPAC's data appears to be derivative of Teranet's data, many of the same reasons that Teranet would be a poor substitute also mean that MPAC would be a poor substitute for TREB's MLS.¹³⁷

95. Absent evidence that MPAC would likely serve as a viable substitute to TREB's MLS, Dr. Church's claim about MPAC should be viewed as speculation inconsistent with the evidence.¹³⁸

c) Brokerage data

96. Dr. Church suggests that, rather than rely on TREB's MLS to obtain sold listings data, there is a "potential for large brokerages and corporate franchisors to self-supply" these data.¹³⁹ In other words, rather than provide data regarding all sold listings, Dr. Church suggests that

¹³⁶ "Teranet Income Fund, Annual Information Form," March 11, 2008. [http://media.corporate-ir.net/media_files/irol/19/198264/Teranet%202007%20AIF.pdf.]

¹³⁷ The view that MPAC would be a poor substitute is confirmed by broker Enchin. [Enchin (Realty Executives Plus) Reply Statement at ¶¶ 7-9.]

¹³⁸ I note, for example, that the evidence appears to show that MPAC's current terms and conditions prevent customers from "republishing" MPAC's data. See MPAC's "The Terms and Conditions of Use of Data" states that "Customer will use Product for its own internal purposes... Customer will not transfer, sell [,] lend, trade, pledge, sub-lease, disseminate or otherwise dispose of Product or any copy or printout of Product, or any part thereof, in any form, to any other person or entity, including affiliates or subsidiaries." [http://www.propertyline.ca/pages_english/pdf/propertyline_TermsConditions.pdf.] See also an April 2011 article in the Toronto Star describes that the difficulty its staff had in acquiring some pricing data from MPAC. The article states that "the data wasn't obtained easily" and that it required a "prolonged negotiation" and the payment of \$2,500. In the end, the author of the article concludes that "[i]t shouldn't take so long, and cost so much, to obtain data bearing such potential use to the public." "Give Ontarians the Tools to do Their Homework," The Toronto Star, April 10, 2011. [<http://www.thestar.com/opinion/editorials/article/972228--give-people-tools-to-do-their-homework>.]

¹³⁹ Church Report at ¶ 214.

Re/Max brokers might be able to just provide Re/Max sold listings, that Royal LePage brokers might be able to provide just Royal LePage sold listings, etc.¹⁴⁰

97. Dr. Church's suggestion that brokers rely on "self-supply" of listings data would not be a good or close substitute to TREB's MLS data on sold listings. First, even the largest franchise brokerage would have only limited information about sold listings. By focusing on just its own sold listings rather than all the sold listings in the MLS, Brokerage E would lose access to approximately 70 percent of sold listings.¹⁴¹ Second, smaller brokerages would face an even greater competitive disadvantage than would Brokerage E. There are hundreds of brokerages that, while collectively accounting for a high share of all real estate activity in the GTA, individually have access to only a very small share of total listings. And, as discussed in more detail below, limited data is of limited value. Thus, for smaller brokerages, Dr. Church's prescription to "self-supply" has little or no practical value.

98. Dr. Church's speculation that brokers might be willing to share their sold data between themselves is also without basis. In particular, Dr. Church fails to address a significant tension in his own arguments. On one hand, he argues that information about sold listings is confidential, sensitive information that brokers would be extremely reluctant to share or make available on the Internet.¹⁴² On the other hand, he suggests that brokers might readily be willing to share this information with the express purpose of making that information available through VOWs.

d) FSBO websites

99. Dr. Church suggests that brokers acquire information about sold listings from FSBO sites. Dr. Church does not suggest what FSBO sites might have this information about sold listings (or the level of information that those sites provide about each sold listing), what costs a broker would incur to acquire those data, the reliability and timeliness of the data that might exist on these unnamed FSBO sites,¹⁴³ or whether a broker would be able to effectively scrape those data off a FSBO site for use on their own VOW website. Dr. Church also does not provide any evidence as to whether those FSBO sites provide sold listings for listings that were previously in the MLS or if he instead believes they limit their data to FSBO listings. Further, if these FSBO websites only include information about FSBO sold listings, Dr. Church fails to address the concern that FSBO sales appear to constitute a small share of all sales in the GTA, and thus the FSBO websites he envisions collecting data from would be unable to provide much data. Finally, it is unclear how Dr. Church's FSBO websites would even collect data to post if the FSBO sale

¹⁴⁰ Dr. Church implicitly assumes that the individual agents and brokers that he elsewhere characterizes as competitors would be able to share this information with no antitrust risk.

¹⁴¹ Based on Brokerage E's share of sell-side listings, during the period January 2007 to February 2012.

¹⁴² Church Report at ¶¶ 326-327 and 342.

¹⁴³ CREA's CEO (Simonsen) notes that there has been a "significant problem with the accuracy and currency of the MLS listing information shown on third party websites" and that "the internet was inundated with inaccurate and out of date listing information." [Simonsen (CREA) Statement at ¶51.]

involves one individual selling directly to another without the involvement of any brokers or other real estate professionals.

100. Thus, Dr. Church's suggestion that competitive concerns are unfounded because of the protection offered by FSBO sites appears to be without evidentiary basis or support.

e) Appraisers and appraiser websites

101. Dr. Church suggests that, absent the ability to show MLS information about sold listings on their VOWs, brokers could readily substitute to using information from appraisers and appraiser websites.¹⁴⁴ The evidence, however, shows that this would not be a viable alternative to the MLS for brokers seeking reliable information about sold listings.

102. Although Dr. Church appears to suggest that appraisers and appraisal websites are some kind of independent source of real estate information to which brokers could turn if they could not use MLS information, this is not true. Appraisers do not collect all of their own information, but instead rely on the same data sources that brokers rely upon. These sources include the MLS data, Teranet and MPAC. With respect to the MLS data, brokers will be unable to turn to appraisers for the same MLS data that TREB is prohibiting brokers from showing on their VOWs. Similarly, all of the previously discussed problems with Teranet and MPAC data continue to apply whether the brokers get those data directly from Teranet and MPAC, or instead through some appraiser intermediary.

103. Appraisers and their websites are also unable to provide aggregated information that serves as a close substitute to what brokers could otherwise get from the MLS. In particular, while appraisal websites commonly provide estimates about particular homes, those estimates can be very unreliable¹⁴⁵ and imprecise.¹⁴⁶

2. Entry is unlikely to create good alternatives in the future

104. Dr. Church asserts that "[e]ntry [into the provision of the confidential data] might be relatively easy."¹⁴⁷ Dr. Church provides no evidence to support this speculation. In particular, Dr. Church fails to identify any possible entrants, to indicate how long entry would likely take, the number of entrants that would be likely, entrants' likely costs and pricing incentives, how much

¹⁴⁴ Church Report at ¶221.

¹⁴⁵ According to CREA's CEA (Simonsen), reliability of data is critical and concerns that third-party websites such as Zoocasa did not provide accurate and timely data were one of CREA's motivations in pursuing its data distribution facility (DDF) plans whereby those third-party websites could be provided with more accurate, and more up-to-date (non-confidential) data from MLSs. See Simonsen (CREA) Statement at ¶¶ 51-58.

¹⁴⁶ As discussed in Section III.B.4, my own investigation showed that different appraisal websites provide very different (and very inaccurate) estimates for the same house.

¹⁴⁷ Church Report at ¶ 257. Dr. Church asserts elsewhere in his report that "[e]ven if there are costs of accessing those data sources, rival suppliers still *might* emerge in response" [Church Report at ¶ 210.]

competitive pressure those entrants would face to offer data on competitive terms, or the likely cost that brokers would face in acquiring data from those future entrants.

105. Perhaps most important, Dr. Church fails to indicate where these entrants would obtain data regarding sold listings. In essence, those new entrants that Dr. Church believes might emerge to protect brokers are likely to find it just as difficult – if not more difficult – to obtain the sold listings data as the brokers would themselves.

C. TREB's prohibitions on letting brokers use VOWs to distribute information to customers harm brokers as consumers value the ability to access information from VOWs

106. Dr. Church argues that consumers get little or no value from being able to access information about sold listings over their broker's VOW relative to instead getting that information through more traditional means (e.g., phone, fax or in-person) or not getting that information at all. Accordingly, Dr. Church concludes that consumers won't care if TREB prevents brokers from using VOWs to provide them with sold listings information. And as long as consumers do not care about TREB's restrictions on how brokers compete, Dr. Church concludes that brokers are not harmed by TREB's conduct.

107. Dr. Church's two principal claims are not only without any evidentiary support, but they are also contradicted by the facts. First, the evidence contradicts Dr. Church's unsupported claim that the manner in which brokers provide them information is unimportant to consumers. In fact, the evidence is quite clear that many consumers have a strong desire to access real estate information using the Internet rather than more traditional distribution means. Second, the evidence contradicts Dr. Church's unsupported claim that consumers are not disadvantaged if TREB prevents them from accessing all the sold information available on the MLS.

1. Consumers care about how brokers provide information

108. Dr. Church claims that since consumers can (and do) get information on sold listings from their broker through more traditional means (e.g., phone, fax, email, or in-person), it doesn't matter if brokers are prohibited from providing that same information over a VOW.¹⁴⁸ In Dr. Church's words, TREB's restrictions are unimportant because "clients of VOWs will still have access to all of the confidential information. TREB puts no restrictions on the ability of any broker to fax or email WEST listings, pending solds, and sold data to their clients."¹⁴⁹ Thus, Dr.

¹⁴⁸ See Church Report at ¶¶ 11, 16-18, and 270-271.

¹⁴⁹ Church Report at ¶ 270. This is one of the very few places where Dr. Church addresses TREB's restrictions on either WEST listings or pending solds.

Church claims that the manner in which brokers distribute information to consumers is irrelevant.¹⁵⁰

109. Dr. Church provides no evidence supporting his claim that consumers are indifferent to the manner in which brokers provide them with real estate information. In fact, as discussed earlier in this report, the evidence overwhelmingly shows that consumers care very much about how they get this information and that they want to access it over the Internet.¹⁵¹ This evidence includes recognition by CREA, TREB and many others in the real estate profession that consumers care very much about how they gain access to real estate information. Consumers' preference for accessing real estate information over the Internet also explains the explosive growth of real estate Internet websites, the high share of consumers that now rely on Internet websites to learn about real estate, the significant increase in brokers' use of IDX websites in many parts of the country, and the popularity (where allowed) of brokers' VOW websites. In short, consumers have clearly demonstrated strong preferences for using modern, innovative means of learning about real estate markets over the more traditional means that Dr. Church concludes are acceptable alternatives.¹⁵²

110. Consumers' preference for receiving real estate information over Internet websites rather than traditional means such as email or fax is hardly surprising. While clearly more impersonal than having a face-to-face or telephone conversation with a broker, Internet distribution has the following features that are viewed attractively by many consumers:

- *Speed.* A consumer can get real estate information almost instantaneously when using a VOW. In contrast, when forced to rely upon a broker as intermediary, a consumer needs to make a request, wait for the broker to get the request (e.g., pick up the voicemail or open the email), wait for the broker to research the request and then respond, and then find the time to review the broker's response once it is delivered.
- *Convenience.* Many consumers use real estate websites during "off hours," e.g., holidays or late at night. During such periods, an immediate broker response to inquiries is unlikely.

¹⁵⁰ Dr. Church claims: "The available evidence suggests that the choice of broker by home buyers and sellers is very unlikely to be determined by whether the confidential MLS data is available at a website as opposed to email or other mode of delivery small differences in the functionality of VOWs are very unlikely to be determinative in a customer's choice of broker or agent." [Church Report at ¶ 16.]

¹⁵¹ See Section II.A.

¹⁵² It is important to note that, despite the prevalence of so many real-estate focused websites, none of those websites provide consumers with access to the excluded data fields. Thus, absent VOWs (which have password protection), consumers are forced to continue relying on more traditional means of accessing that information, despite the clear preference they have shown for accessing all other forms of real estate information over Internet websites.

- *Lack of burden.* Consumers can costlessly view information about numerous homes in numerous communities at numerous different price points when using a VOW. Many consumers might be reluctant to continually burden their broker with requests to run such searches. Some brokers might also be reluctant to respond to repeated inquiries by consumers because of the time required to conduct those searches.
- *Interactive opportunities.* Websites can provide much more information, and be a more useful tool for researching real estate, than a phone call, email, or fax. Emails and faxes, for example, provide a type of “snapshot” of information. A website is more interactive: a consumer can drill down to learn more about areas of interest (e.g., what are the public schools in the area, or what are local crime statistics?) and ignore other areas that are not of interest (e.g., is there nearby public transportation?). An email or fax that provided all of that information about every property would either be extremely long and cumbersome to review, or it would exclude information of potential interest to consumers.

2. Limiting information to consumers creates substantial distortions

111. Dr. Church argues that there is no need for consumers to see all sold listings when trying to assess the true value of a home, and that they could do just as well with just the sold listings from the franchise broker with which they are working.

112. Dr. Church’s claims in this regard are both unsupported and unwarranted. In fact, Dr. Church’s own econometric model suggests that forcing consumers to rely only on sold listings from their own franchise broker would create market distortions in the GTA in excess of \$100 million per month (i.e., over \$1.2 billion per year).

113. To assess the importance of full information versus limited information, Dr. Church estimated two sets of hedonic price regressions on data for homes that sold between January 2007 and December 2011.¹⁵³ He used the same regression model specification in each case, but the regression estimates were generated using two different data sets: (i) the full MLS database and (ii) the MLS database restricted to just Brokerage E listings. The model was estimated separately using data for the top 50 communities as measured by Brokerage E listings in January 2012. Dr. Church finds that the absolute value of the average percentage difference in forecast prices between the two models over the 50 communities is 3.7 percent. From this, he concludes that “Brokerage E data would be nearly as useful an input for a price forecasting exercise for any listing as are the ‘full’ MLS data.”

¹⁵³ See Church’s Report at ¶¶ 216-217. A hedonic price regression is a regression model that explains the price of a house as a function of its attributes (e.g., number of bedrooms and style of the house).

114. Yet, contrary to Dr. Church's conclusion, his own results indicate that consumers would likely incur *substantial* harm.¹⁵⁴ A simple way to show this is by applying the 3.7 percent difference that Dr. Church estimates to January 2012 sales of approximately \$2.3 billion in the GTA. Dr. Church's results mean that, by limiting the amount of information consumers would see, consumers' estimates of homes' true values would be significantly distorted, with those errors in estimated home values totaling approximately \$85 million in January 2012.¹⁵⁵

115. Dr. Church also underestimates the magnitude of consumer harm from having to rely on a limited sample of sold listings data by focusing solely on Brokerage E (the largest broker in the GTA) and by only looking at the communities in which Brokerage E is largest.¹⁵⁶ Both of these approaches increase the number of sold listings that Dr. Church assumes that a single broker could make available to a consumer and thus cause Dr. Church to understate actual harm.

116. To correct these biases that Dr. Church introduced and thus better estimate the true magnitude of the distortion that would be created by forcing consumers to look only at sold listings associated with their own broker's franchise, I replicated his analysis separately to take into account the sizes of different brokers and the fact that brokers would have fewer available sold listings in those communities where they have less of a market presence.¹⁵⁷ I find that, once Dr. Church's analysis is corrected to account for smaller brokerages and smaller communities, the "small" errors he finds become much larger. This is illustrated in Exhibits E.1-E.3 which show the differences between predicted home prices using the full data sample and the limited data sample for several cases other than Brokerage E and Brokerage E's largest communities.¹⁵⁸ The figures show that the two forecasted prices are frequently very different – estimates are frequently off more than \$50,000. These results, on a community-specific, brokerage-specific basis, are presented in Exhibit F.

117. These errors become very large when assessed across all listings in the GTA. I find that total market distortions across the GTA from having to rely on a limited sample of sold listings would total approximately \$120 million in January 2012. Thus, relying on Dr. Church's basic approach but correcting it to take into account differences across brokers and communities, it

¹⁵⁴ I define harm as the absolute difference between the price prediction based on the full MLS database and the prediction based on the MLS database restricted to just Brokerage E listings. In other words, consistent with Dr. Church's approach, I treat the forecast based on the full MLS dataset as the "correct" or "best" forecast (given the information contained in the MLS database), and I treat a deviation from this prediction as a "mistake."

¹⁵⁵ \$85 million = 3.7 percent times \$2.3 billion.

¹⁵⁶ Brokerage E is 70 percent larger than the second largest broker, Brokerage D based on the number of sell-side listings from 2007 – 2012.

¹⁵⁷ In this analysis, I looked separately at the top five brokers (Brokerage E, Brokerage D, Brokerage B, Brokerage C and Brokerage A) and I conservatively estimated that the effects of limited information for the smaller brokers were equivalent to the effect experienced by Brokerage A, the smallest of the top five brokers.

¹⁵⁸ Predictions for non-top five brokers were based on regressions that use Brokerage A's sample of listings. Compare these to the much smaller errors that Dr. Church identifies in Figures 7.1 to 7.4 of his report.

follows that forcing consumers to rely on a limited sample of sold listings to estimate home value would create market distortions on the order of approximately \$1.4 billion per year.

118. Dr. Church asserts that the limited sample available to any one brokerage might be overcome if brokerages sold this information to each other, thereby creating a mechanism by which they could acquire the information that TREB has already made available on its MLS. Dr. Church fails to show, however, that such an option is realistic. In particular, he fails to discuss why a large brokerage would be willing to help another smaller brokerage by providing it with sales data. He also fails to discuss the costs of creating a system in which brokers could provide this information to each other in the same reliable, timely manner that is already available through TREB's MLS. Dr. Church also fails to discuss the prices that brokerages might charge each other for these data, and whether larger brokerages would have incentives to charge excessively high prices to smaller brokerages as a means of disadvantaging those small brokers and thereby increasing market concentration. Finally, Dr. Church fails to discuss why brokers would be willing to provide these data for use on each other's VOWs when, in Dr. Church's view, these sold data are confidential and sensitive, and if made available on VOWs, likely to threaten the future stability of TREB's MLS.

D. TREB's restrictions reduce competition regardless of market competitiveness

119. Dr. Church argues that because the market for real estate brokerage services is very competitive, TREB's conduct cannot be expected to reduce competition. Dr. Church, however, not only substantially overstates the degree of competition in the GTA's real estate services markets, he inappropriately suggests that significant competition precludes TREB's conduct from reducing competition. As I discuss, in focusing on levels of *static* competition, Dr. Church fails to recognize that TREB's conduct can still reduce *dynamic* competition that benefits consumers.

1. Dr. Church overstates the degree of static competition in the GTA's real estate brokerage markets

120. Dr. Church substantially overstates the degree of competition in the GTA markets for real estate services, incorrectly claiming that the market is almost "perfectly competitive" and that, in assessing competition by looking at market shares or concentration, one should look at competition at the agent-specific level. By overstating the extent of competition and the efficiency of the GTA real estate market, Dr. Church attempts to downplay the likelihood that market power could be exercised and that there could be existing market distortions (e.g.,

steering problems) that VOWs could mitigate.¹⁵⁹ Thus, Dr. Church's characterization of the extent of competition in the GTA creates an inaccurate view of the market.¹⁶⁰

a) Dr. Church incorrectly characterizes the market as perfectly competitive

121. In characterizing the market in which real estate agents and brokers compete, Dr. Church claims that "it is hard to conceive of an industry that more closely resembles textbook perfect competition."¹⁶¹ This significantly overstates the degree of (static) competition in the market. While Dr. Church is correct that there are not significant barriers to entry into this market, and that there are numerous individual competitors with small market shares, he ignores other characteristics of the market that cause it to significantly deviate from "textbook perfect competition."

122. The GTA deviates from Dr. Church's claim of a "textbook perfect competition" market in several important regards from what Dr. Church's own textbook identifies as characterizing a perfectly competitive market.¹⁶²

- *The assumption of homogeneous output does not hold.* Dr. Church states in his textbook that one of the main assumptions of a perfectly competitive market is that "[o]utput is **homogeneous**. That is, consumers cannot distinguish between products produced by different firms."¹⁶³ Dr. Church's textbook characterization of a perfectly competitive market, however, does not hold in this market. The services provided by real estate

¹⁵⁹ My disagreement with Dr. Church is principally over his gross overstatement of the degree to which the market for real estate services in the GTA is competitive. I do not mean to suggest that there is not competition among competing brokers. As discussed at length in both this report and my June Report, however, this existing competition should not be taken as evidence that TREB's conduct is not preventing the market from moving to an even more competitive outcome. Similarly, existing competition should not be taken as evidence that TREB cannot have, or exercise, substantial market power in the markets for real estate services.

¹⁶⁰ I note that, while I presented some information in my June Report relating to market shares at the franchise brokerage level (Vistnes June Report at ¶¶ 131-132 and Exhibits 3a – c), there was no suggestion that those shares provided a useful proxy for the level of competition in the GTA market. Rather, those shares were provided to show the substantial financial stake that the largest franchise brokers have in the GTA real estate market, and thus why even small changes in how competition occurs in those markets could have significant financial consequences for those franchise brokerages.

¹⁶¹ Church Report at ¶ 249.

¹⁶² Dr. Church's textbook also identifies small economies of scale as a characteristic of perfectly competitive markets. Dr. Church appears to believe this assumption is also violated, arguing at one point in his report that TREB's prohibitions on VOWs are necessary to protect brokers' significant investments. [Church Report at ¶ 319.] If Dr. Church's claim at portion of his report were true, it would undercut his implicit claim that economies of scale are small.

¹⁶³ Jeffrey R. Church and Roger Ware, Industrial Organization: A Strategic Approach, New York: McGraw-Hill (2000) at page 21 (hereafter, "Church and Ware") (*emphasis* in original) (available at <http://works.bepress.com/>). See also Church and Ware at page 10 describing "the theory of perfect competition, which assumes homogeneous products."

brokers are differentiated in several important dimensions. Perhaps most important for this case, brokers seek to differentiate their services by offering VOWs. But brokers also differ in other important dimensions that Dr. Church acknowledges elsewhere in his report, including reputation and quality of service.¹⁶⁴

- *The assumption of perfect information does not hold.* The second assumption in Dr. Church's textbook of a perfectly competitive market is that "[i]nformation is perfect" including the assumption that "consumers are fully aware of their alternatives."¹⁶⁵ As Dr. Church recognizes in his report, this assumption is also violated in the GTA real estate markets, as these markets are characterized by asymmetric information in which agents and brokers are much more knowledgeable than consumers. Dr. Church further acknowledges that this asymmetric information leads to principal-agent relationships between consumers and brokers that in turn create further market distortions associated with what economists refer to as "moral hazard" (i.e., incentive) problems.¹⁶⁶ These deviations allow brokers to charge higher commissions than they would otherwise charge in a more competitive market. As Dr. Church states, "with asymmetric information about effort, agents will therefore earn commissions greater than they would if there was symmetric information."
- *The assumption of no non-price competition does not hold.* Perfectly competitive markets are normally characterized as having no significant elements of non-price competition.¹⁶⁷ Non-price competition typically emerges in imperfectly competitive markets in which there is significant differentiation among competitors. Dr. Church explicitly acknowledges this non-price competition: "competition among agents may focus significantly around non-price efforts such as the level and quality of service, including the accuracy of the listing valuation, and reputation of the agents."¹⁶⁸

b) Dr. Church incorrectly assumes that agents are independent competitors

123. Dr. Church seeks to quantify the competitiveness of the GTA market for real estate services by calculating market shares, HHI concentration statistics and something that Dr.

¹⁶⁴ Church Report at ¶ 78. See also Church Report at ¶ 82 in which Dr. Church discusses the role of agents' reputations in differentiating themselves from competitors and acknowledges that "the choice of agent is heavily influenced by referrals and personal contacts," another dimension of differentiation.

¹⁶⁵ Church and Ware at page 21.

¹⁶⁶ Church Report at ¶¶ 73-77.

¹⁶⁷ See, for example, Church and Ware at page 8 discussing how non-price competition typically arises when consumers do not consider products to be perfect substitutes.

¹⁶⁸ Church Report at ¶ 78 (footnotes omitted).

Church calls a “turbulence measure.”¹⁶⁹ In calculating these measures of competition, Dr. Church overstates the degree of competition. Although Dr. Church presents these statistics at the “broker level,” he argues that this measure “understates the true extent of competition” and that “[t]he agent level is arguably the level that is most appropriate for analyzing the extent of competition. This is because individual agents do compete with one another, even if they belong to the same brokerage.”¹⁷⁰

124. By looking at agent-level market shares and HHIs, Dr. Church deviates from normal economic practice. Economists generally recognize that, even though there may be some competition across individual units of the same firm, those individual units should be aggregated when calculating market shares and HHIs, not counted separately.¹⁷¹

125. It is clear, however, that individual agents within the same brokerage are *not* independent competing entities. As Dr. Church acknowledges, agents are employees (or have a contracting relationship with) their broker.¹⁷² Thus, by assuming that agents within the same brokerage are independent competing entities, Dr. Church significantly overstates the degree of competition in GTA real estate markets.

2. *Competitive markets do not prevent TREB’s conduct from reducing dynamic competition*

126. Although Dr. Church overstates the degree of competition present in real estate brokerage service markets, I do not disagree with his general observation that there is currently significant *static* competition among brokers in those markets.¹⁷³ Yet, regardless of how competitive the market for real estate services might be in a static sense, this does not mean that TREB’s conduct does not substantially reduce *dynamic* competition.

¹⁶⁹ The HHI (Herfindahl-Hirschman Index) is a measure commonly used to assess market concentration. It is calculated by summing the square of each independent competitor’s market share in a relevant market. For example, in a market with four firms with market shares of 10%, 20%, 30% and 40%, the HHI equals $10^2 + 20^2 + 30^2 + 40^2 = 3,000$.

¹⁷⁰ Church Report at ¶¶ 130 and 147.

¹⁷¹ For example, in evaluating a supermarket or oil company merger, one would not consider individual Loblaw supermarket locations or individual Shell gasoline stations as competing entities when calculating market shares or HHIs, even though the individual store managers and gas station owners have an incentive to compete for customers.

¹⁷² As Dr. Church acknowledges, “[s]alespersons and brokers both work for brokerages. Salespersons are often independent contractors and they work under the supervision of a broker.” Church Report at ¶ 28 (footnotes omitted). The evidence is also clear that brokers and their agents coordinate between themselves on certain competitively sensitive terms, including how they will split commission fees. (See, for example, Witness Statement of Tung-Chee Chan (Tradeworld Realty, Inc.), July 27, 2012 at ¶ 4, Witness Statement of Timoleon Syrianos (Ultimate Realty, Inc.), July 26, 2012 at ¶ 5, and Witness Statement of Pamela Prescott (Century 21 Heritage Group, Ltd.), July 27, 2012 at ¶ 9.)

¹⁷³ For this reason, I do not find it productive to rebut any aspects of the analyses that Dr. Church claims to support this conclusion other than to point out that Dr. Church should not have assumed that agents employed by the same broker are independent competitors.

127. In suggesting that a “perfectly competitive” real estate services market precludes competitive harm, Dr. Church fails to identify the correct but-for world for purposes of analyzing TREB’s conduct. As previously discussed (Section II.B), the correct but-for world is one in which TREB’s restrictions on how brokers compete are not in place. In that but-for world, there is likely to be significant competition among agents and brokers, just as there is today. Yet, while there is likely to be significant competition among agents and brokers in both worlds, the technology and means by which brokers compete differs. In the but-for world, brokers can use VOWs to provide real estate information to their customers, thus improving services to consumers and lowering their own costs (which in turn is likely to result in lower commissions). Thus, VOWs allow for even more competition in the but-for world as evidenced by lower prices and more attractive services.

128. In fact, Dr. Church’s observation that there is significant static competition among brokers in the GTA real estate market helps to put brokers’ desire to offer VOWs in a useful perspective. As discussed above, static competition creates strong incentives for firms to differentiate themselves from their competitors as a means of attracting customers and earning profits. As discussed in my June Report, the resulting dynamic competition that changes how firms compete and the products and services they offer provides substantial consumer benefits by making even competitive markets more efficient and by creating incentives for competing firms to offer even more attractive goods and products and means by which they can offer lower prices.¹⁷⁴

129. VOWs offer just this opportunity for brokers in the GTA to offer new, attractive services to consumers, and at lower commission rates, as a means of competing for customers. Thus, the existing static competition in the GTA market provides the impetus for continued dynamic competition. Similarly, by offering VOWs that help mitigate market distortions that harm consumers, brokers can differentiate themselves and try to attract additional customers. These opportunities to earn profits by offering new, innovative services are the very incentives that drive competitive markets. Thus, the significant static competition that Dr. Church observes in today’s market likely explains brokers’ desire to continue competing by offering VOWs.

VI. DR. CHURCH FAILS TO REBUT EVIDENCE THAT TREB’S POST-2011 CONDUCT WITH RESPECT TO BUYER COMMISSIONS SUBSTANTIALLY REDUCES COMPETITION

130. In my June Report, I provided evidence of market distortions that reduce competition in the GTA’s real estate services markets and discussed how, by mitigating those distortions, VOWs could increase competition. In particular, I discussed how VOWs can reduce asymmetric information between brokers and consumers, and thus reduce steering problems and other incentive problems.

¹⁷⁴ See Vistnes June Report at Section VII.

131. Although Dr. Church acknowledges the information asymmetries and incentive problems that distort competition in the real estate industry,¹⁷⁵ he argues that there is no evidence of steering in the GTA, and thus no market distortion for VOWs to correct.¹⁷⁶ These arguments are without basis. Not only do Dr. Church's own analyses largely *reject* his argument that steering is not an issue in the GTA, but a broad body of evidence confirms that steering is a competitive problem, and thus a way in which VOWs can increase competition.

A. Dr. Church acknowledges distortions and steering due to asymmetric information

132. Dr. Church acknowledges that there can be important incentive problems in the real estate industry and that consumers may need to offer higher commissions as a means of overcoming those problems, noting for example, that:

“if the seller and listing agent offer a higher commission to the cooperating broker, it might increase the efforts of the cooperating brokers to find buyers. In such situations [a reduction in] the commission that must be paid [to] cooperating [buy-side] brokers appear[s] to be against the interests of sellers and listing agents.”¹⁷⁷

133. Similarly, Dr. Church acknowledges that significant information asymmetries between consumers and real estate agents create a principal-agent relationship in which incentive problems can arise:

“The relationship between a home seller or buyer and their real estate brokerage is an example of a principal-agent relationship If the interests of the principal [the home seller or buyer] and the agent [the real estate brokerage] differ and there is asymmetric information, then incentive issues arise... Two incentive issues that arise in the context of real estate involve the following examples of moral hazard: Effort ... [and] Advice [whereby] [t]he agent has incentives to provide advice that improves their payoff, not necessarily the advice or information that is in the best interests of the principal.”¹⁷⁸

134. Dr. Church further recognizes that these incentive problems attributable to asymmetric information benefit brokerages at the expense of consumers:

“In a competitive market with asymmetric information about effort, agents will therefore earn commissions greater than they would if there was symmetric information. The higher commission induces higher effort, but at the same time provides the agent with a larger share of the gains from trade from the transaction, i.e., the sale of the house. Moreover, sellers will be reluctant to contract

¹⁷⁵ Church Report at ¶¶ 73-77.

¹⁷⁶ This discussion constitutes the only discussion in Dr. Church's report addressing the issue of competitive effects due to TREB's discriminatory restrictions relating to pending sales, WEST listings and buy-side commission offers.

¹⁷⁷ Church Report at ¶ 328.

¹⁷⁸ Church Report at ¶¶ 73-74 (footnotes and *emphasis* omitted).

with agents at lower commission rates, since they will infer that the agent will exert less effort, making the seller worse off.”¹⁷⁹

135. Dr. Church goes on to concede that commission payments are often used to overcome these incentive problems:

“Principals [the home buyers or sellers] attempt to control for the potential for moral hazard ... For instance, it is well known that commissions are a way to elicit effort and better adviceIn general home sellers ... prefer lower commissions. But they may not do so if there is asymmetric information because of the following trade off: lower commissions mean lower effort and lower expected sales price Hence if a lower commission results in lower effort, the principal may not prefer a lower commission.”¹⁸⁰

136. Finally, Dr. Church acknowledges that:

“Hence, even with competition, there will be ‘downwards stickiness’ to commission rates.”¹⁸¹

137. Thus, Dr. Church clearly acknowledges asymmetric information in the real estate industry, and that it not only causes competitive distortions that harm consumers but also likely results in higher commission payments.

B. Dr. Church fails to show that steering does not create competitive distortions

138. Despite Dr. Church’s acknowledgment that asymmetric information creates incentive problems in the real estate industry, he argues that there is no evidence of steering in the GTA. In particular, Dr. Church presents results from an econometric analysis in which he performs the following three tests of the hypothesis that lower buyer commissions result in steering:¹⁸²

- Do lower buy-side commission rates result in lower home sales prices?
- Do lower buy-side commission rates result in longer days-on-market?
- Do lower buy-side commission rates result in a lower probability of sale?

139. Although Dr. Church concedes that his own test of whether lower buy-side commission rates result in lower home sales prices actually confirms the hypotheses that there is buyer steering, he claims that his other two tests reject that hypothesis. In fact, further inquiry shows

¹⁷⁹ Church Report at ¶ 77, *emphasis added*.

¹⁸⁰ Church Report at ¶¶ 75-76. See also Church Report at ¶ 283 in which he states that “consumers may have only a limited interest in reducing the commission rate, and a significant interest in incentivising their agent to achieve the best deal for them.”

¹⁸¹ Church Report at ¶ 77.

¹⁸² Church Report at ¶¶ 304-307.

that all three of his tests should be viewed as *failing* to reject that hypothesis.¹⁸³ Thus, the empirical evidence supports what Dr. Church previously appeared to acknowledge: that there exist serious competitive distortions due to asymmetric information.

1. *Buy-side commission rates and days-on-market*

140. Dr. Church attempts to test whether homes with lower buy-side commissions sell more slowly than comparable homes with higher buy-side commissions. The proper test of this hypothesis is whether, rather than a negative relationship between buy-side commission and days-on-market, there is *no* relationship. Dr. Church, however, finds a very different and implausible result: a *positive* (and statistically significant) relationship which suggests that lower buy-side commissions actually *reduce* the time a home spends on the market.

141. Although Dr. Church takes his finding as evidence rejecting the hypothesis that buyer steering occurs, this conclusion is unwarranted. Rather, there are two much more plausible explanations for his implausible finding. First, there is likely to be correlation between buy-side commissions and certain unobserved inherent characteristics of homes. As an example, in some cases, buyers may be offered higher commissions because the home is more difficult to sell.¹⁸⁴ In other words, in some cases a higher commission likely reflects that steering occurs, and is an attempt to induce brokers to steer their clients to an otherwise difficult-to-sell home. In that case, it is hardly surprising that difficult-to-sell homes, which may be associated with higher buy-side commissions, spend longer on the market. And similarly, easier-to-sell homes, associated with lower buy-side commissions, may not spend long at all on the market. Thus, Dr. Church's findings are more consistent with the existence of buy-side steering than they are with the lack of any steering.

142. A second explanation also shows that one cannot use Dr. Church's findings to conclude that steering is not a significant problem in the GTA. If lower buy-side commissions are the result of the sell-side broker keeping a higher share of the overall commission for themselves, then there is a confounding factor in the empirical analysis that Dr. Church fails to control for, namely the sell-side commission and the level of sell-side effort that this higher commission induces. If lower buy-side commissions mean higher sell-side commissions, and thus greater sell-side effort, then the lower days on market that Dr. Church finds associated with low buy-side

¹⁸³ Both Dr. Church and I look at the commission rates that are offered to buy-side agents. In some cases, those commission rates may be renegotiated so that the final buyer commission differs from the offered commission rate that appears in the MLS data. It is also important to recognize that the *offered* commission rate is likely what will affect an agent's incentive to steer their customer to, or away from, a particular home. Accordingly, the use by both Dr. Church and me of the "offered" buyer commission rates shown in the MLS is appropriate.

¹⁸⁴ These characteristics are observed by the seller and potential buyers, and thus are incorporated in prices and commissions. They are, however, unobserved by the econometrician (Dr. Church in this case) who thus cannot control for them in the regression analysis. This leads to what is known as "omitted variable bias." Characteristics that are hard to measure (and as such are unobserved by the econometrician) but that play an important role in home evaluations are sometimes referred to as "curb appeal."

commissions may simply reflect that sell-side efforts overwhelm buy-side steering. Thus, Dr. Church's conclusion that there is no buy-side steering is again unwarranted.

143. Finally, Dr. Church's finding that higher buyer commissions result in longer days on market may simply be an artifact of Dr. Church incorrectly calculating days on market when performing his analysis. As mentioned in my June Report,¹⁸⁵ absent VOWs' ability to more accurately track how long a home has actually been on the market, brokers can manipulate information by pulling and then re-listing properties to make it appear that a property is "fresh," i.e., that it has just come onto the market.¹⁸⁶ Failure to control for those pull-and-relist homes (something that is hard to do with the MLS data that Dr. Church has been working with) means that the days on market data that Dr. Church relies upon will often be incorrect.¹⁸⁷

2. Buy-side commission rates and probability of sale

144. Dr. Church attempts to test whether homes with lower buy-side commissions are less likely to sell. Once again, he finds an implausible result: that lower buy-side commissions actually *increase* the probability of a sale. This finding can again be explained without rejecting the hypothesis that steering occurs for reasons very similar to the ones discussed above:

- There is likely to be correlation between buy-side commissions and certain unobserved inherent characteristics that make homes less likely to sell. In that case, Dr. Church's results simply confirm that difficult-to-sell homes are more likely to be pulled off the market.¹⁸⁸
- If lower buy-side commissions are correlated with higher sell-side commissions, then a lower buy-side commission means sellers will expend greater effort, and that this greater sell-side effort may overwhelm buy-side steering.

¹⁸⁵ Vistnes June Report at ¶ 63.

¹⁸⁶ See also Catherine Tucker, Juanjuan Zhangy, and Ting Zhu, "Days on Market and Home Sales," Working Paper, March 21, 2012 ("the days on market statistic in real estate listings has been a target of rampant manipulation. Sellers regularly pull sluggish listings off the market, and relist them immediately, resetting their days on market to zero. This practice has been criticized as 'resetting the odometer on a used car.'")

¹⁸⁷ For example, the records in Dr. Church's dataset identified by MLS numbers [REDACTED], [REDACTED], and [REDACTED] pertain to the same home. This property was first listed in [REDACTED], then terminated after [REDACTED] days; it was relisted in [REDACTED], then terminated after [REDACTED] days. It was finally listed in [REDACTED] and sold after [REDACTED] days on the market. Dr. Church's analysis assumes that this property stayed on the market for only [REDACTED] days, while in fact it was on the market for over [REDACTED] days.

¹⁸⁸ I explored the presence of unobserved (to the econometrician) characteristics by including home fixed effects as additional controls in Dr. Church's model. Fixed effects are indicator variables for each home in the dataset; they control for time-invariant omitted home characteristics or attributes. I found that when fixed effects are included, a higher buyer agent commission is statistically significantly correlated with a *higher* probability of sale (i.e., the opposite of what Dr. Church finds). This suggests that Dr. Church's analysis suffers from an omitted variable bias that renders his results unreliable.

- Homes may be pulled off the market for a variety of reasons that Dr. Church simply cannot capture in the MLS data. Those missing variables can bias Dr. Church's findings.

C. Dr. Church fails to provide other evidence that VOWs are unlikely to reduce competitive distortions

145. Dr. Church offers several ideas for why VOWs are unlikely to reduce competitive distortions. In each case, his arguments are flawed or unsupported by the evidence.

- *Dr. Church claims that consumers can readily access the information they need to identify and challenge steering by using Internet websites other than VOWs.*¹⁸⁹ Dr. Church has no basis to make this claim. In particular, information regarding buy-side commissions, WEST listings and pending sales is *not* readily available to consumers on any other website, and consumers cannot access information regarding sold listings from sites such as Teranet or MPAC. In contrast to Dr. Church's claims, there do not appear to be any such websites where consumers can access the relevant data.¹⁹⁰
- *Dr. Church suggests that steering problems can be overcome by having buyers provide a commission guarantee to their agent.*¹⁹¹ Thus, Dr. Church seemingly envisions that buyers should guarantee their broker a (e.g.) 2.5 percent commission offer, and thus eliminate the incentives their broker would otherwise have to avoid showing them an attractive home with an (e.g.) 1.5 percent commission offer. Dr. Church, however, does not consider the ramifications of his proposed solution: implementing such a solution could be very costly for the buyer. For example, for a \$500,000 home with a buyer commission offer of 1.5 percent (versus a more standard 2.5 percent commission), Dr. Church's solution would require that the buyer pay an extra \$5,000 to their agent in order to avoid a steering problem.¹⁹²
- *Dr. Church suggests that steering problems could be overcome if the buyer asked their agent, for each listing the agent shows, how much the agent would earn from the sale of that home.* In theory, extracting this information directly from the broker for each listing might work. If, however, buyers would view that as an awkward discussion and thus be reluctant to ask, then steering problems will remain. In any event, it is easy to see why buyers would prefer to get this information in a more anonymous manner over VOWs rather than have to engage in that awkward conversation with their agent.

¹⁸⁹ Church Report at ¶¶ 294-295.

¹⁹⁰ Dr. Church does suggest (¶ 295) that "consumers already operate with an enhanced information base because of the ability to access Internet sites such as Realtor.ca, IDX sites, and other public websites." Those websites, however, clearly do not provide any information regarding the confidential data at issue.

¹⁹¹ Church Report at ¶ 297.

¹⁹² Unless all buyers were expected to adopt Dr. Church's proposed fix, there is no reason to believe that the buyer would recover a \$5,000 commission guarantee in the form of a lower price from the seller.

- *Dr. Church suggests that making buyers aware of dual agency situations adequately addresses steering problems.*¹⁹³ Dr. Church fails to acknowledge that, although making buyers aware of dual agency situations may reduce steering problems stemming from dual agency situations, it does nothing to address the more general steering problem in which a buy-side agent seeks to steer their client towards a high-commission home listed by a different agent.¹⁹⁴
- *Dr. Church suggests that steering may be efficient.* As Dr. Church states: “[i]ndeed, steering away from a low offered commission may be efficient.”¹⁹⁵ Here, Dr. Church appears to acknowledge the very steering that he elsewhere disputes, but argues that this steering may be a good thing because commissions are too low. Dr. Church fails to provide any insights, however, into what constitutes a commission that is “too low,” why a commission might be “too low” and whether that determination should be made from the consumer’s perspective or instead the broker’s perspective. Similarly, Dr. Church fails to discuss why increased consumer information from VOWs would not be a valuable means by which to better determine if, in fact, that steering away from low commissions is appropriate, or simply a manifestation of the steering problem itself: brokers steering buyers away from commission that are “too low” because that compensation is below the broker’s opportunity cost associated with making a more profitable sale.

VII. DR. FLYER FAILS TO REBUT EVIDENCE THAT TREB’S POST-2011 CONDUCT SUBSTANTIALLY REDUCED COMPETITION

146. Dr. Flyer’s rebuttal to the evidence that TREB’s post-2011 conduct substantially reduced competition consists of two paragraphs in which he argues that the excluded data fields are “not highly valuable to consumers” and that, although perhaps costly to obtain, those excluded data fields could be accessed elsewhere over the Internet or through their broker.¹⁹⁶ Dr. Flyer makes these claims, however, without providing any supporting evidence. In fact, the evidence directly contradicts those claims.

A. Dr. Flyer incorrectly suggests that the excluded data are not valuable

147. Dr. Flyer suggests that the excluded data fields “are not highly valuable to consumers.”¹⁹⁷ The only evidence that Dr. Flyer offers to support this assertion is a cite to a 2009 NAR report

¹⁹³ Church Report at ¶ 298.

¹⁹⁴ Even if disclosure rules regarding dual agency situations *reduce* steering problems, as discussed in my June Report, they do not appear to have eliminated all such problems.

¹⁹⁵ Church Report at ¶ 302.

¹⁹⁶ Flyer Report at ¶¶ 24 and 25.

¹⁹⁷ Flyer Report at ¶ 24.

that he characterizes as finding that information about recently sold properties was one of the “least useful features” of real estate websites. This support, however, is both limited and not on point.

148. First, the evidence that Dr. Flyer’s cites speaks only to consumers’ valuation of sold property information – it says nothing rebutting the evidence that the other elements of the excluded data fields are valuable to consumers.

149. Second, Dr. Flyer neglects to point out that the NAR report to which he cites actually shows that consumers *do* value sold property information. In particular, that 2009 NAR report shows that 28 percent of buyers who use the Internet indicated that detailed information about recently sold properties was “very useful” and that another 38 percent of buyers found that information to be “somewhat useful.”¹⁹⁸ Thus, the NAR study that Dr. Flyer relies upon shows that 66 percent of buyers value information about sold properties. Further, while not mentioned by Dr. Flyer, the NAR study was updated in 2011.¹⁹⁹ That updated study found that the share of buyers who value information about recently sold properties increased to 73 percent (30 percent of buyers found the information to be “very useful” and 43 percent found it to be “somewhat useful”).²⁰⁰ This clearly detracts from Dr. Flyer’s claim that “the marginal value of this [sold properties] information to consumers may be low.”²⁰¹

150. The NAR study to which Dr. Flyer cites also speaks to an issue that Dr. Flyer does not address: the value of information regarding pending listings (another element of the excluded data fields). Here, the study that Dr. Flyer relies upon shows that consumers value that information: 34 percent of buyers found information about pending sales to be “very useful” and another 34 percent found it to be “somewhat useful.” Thus, 68 percent of buyers characterize that element of the excluded data fields as useful.²⁰²

151. In contrast to this paucity of support for Dr. Flyer’s claim that the excluded data fields are of no value to consumers, there is substantial evidence that consumers do value the excluded data fields. This evidence was discussed in detail in my June Report.²⁰³

¹⁹⁸ “Profile of Home Buyers and Sellers,” NAR, 2009 at Exhibit 3-18.

¹⁹⁹ Dr. Flyer is aware of the 2011 NAR report, as he cites to it in other sections of his report.

²⁰⁰ “Profile of Home Buyers and Sellers,” NAR, 2011 at Exhibit 3-18. A comparison of the data reported in the 2009 and 2011 NAR reports suggests a possible trend by which this information is becoming increasingly important to consumers over time.

²⁰¹ Flyer Report at ¶ 24.

²⁰² These statistics are again from the 2011 NAR study, but do not differ significantly from the 2009 version.

²⁰³ See Vistnes June Report at ¶¶ 252-261.

B. Dr. Flyer incorrectly suggests the excluded data fields can be acquired elsewhere

152. Dr. Flyer readily acknowledges that the excluded data fields are not particularly confidential, i.e., that there are no restrictions on brokers' provision of that information to their customers as long as the brokers provide it through a means other than a VOW website.²⁰⁴ He claims, however, that this information can be acquired elsewhere.

153. There are two serious flaws with Dr. Flyer's argument. First, Dr. Flyer presents no evidence that consumers can readily access the excluded data fields from any source other than their broker. As discussed at length above, there do not appear to be any viable alternative sources for those excluded data. Thus, Dr. Flyer provides no evidence that brokers can acquire the excluded data fields from a source other than TREB.

154. Second, Dr. Flyer implicitly suggests that limited consumer harm is the same as no consumer harm. He fails, however, to rebut the evidence that many consumers *prefer* to get real estate information via websites rather than using their broker as an information intermediary. Thus, as long as consumers prefer to access real estate information over a VOW, rather than (e.g.) calling or emailing their broker and waiting for that broker to respond with an email or fax with the requested information, then Dr. Flyer should not suggest there is no harm to competition by denying consumers a more attractive service that brokers would otherwise provide.

VIII. THERE ARE NO PLAUSIBLE BUSINESS JUSTIFICATIONS

155. Drs. Church and Flyer claim several business justifications for TREB's post-2011 conduct, but fail to provide evidence that those justifications are real or significant.²⁰⁵

A. Free Riding

156. Dr. Church suggests that TREB's discrimination in how brokers can compete is justified as a means of preventing free riding. In making this business justification, however, Dr. Church appears to be arguing that TREB's MLS should not be treated as an "essential facility" that should be available to the public or to some set of third-party rivals.²⁰⁶ Dr. Church's assumption

²⁰⁴ Flyer Report at ¶ 25 noting that TREB "does not prohibit consumers from acquiring the information in the disputed fields, [but only requires] that the information be sought directly through other means (including from the broker)"

²⁰⁵ In considering possible business justifications for TREB's conduct, I have also considered the business arguments articulated by TREB in their August 19, 2011 Response to the Amended Notice of Application and the Concise Statement of Economic Theory filed with that Response. In my opinion, those filings do not articulate any plausible business arguments that go beyond what Dr. Church discusses in his report.

²⁰⁶ See Church Report at ¶ 19 in which Dr. Church states, "I see no basis on which TREB should be mandated to give access to the confidential price data though the VOW feed" Similarly, see Church Report at ¶ 313 where he states "But there must be a very high hurdle for efficient competition policy to mandate access to the assets of either

that this is some type of essential facilities case in which TREB is being required to make its assets available to an independent rival is clear from the following statement:

“existing brokers have no obligation or responsibility under competition economics and policy to create competition that results in a loss of, and on, investment. There is no positive obligation to assist competitors, especially if it results in financial losses.”²⁰⁷

157. Dr. Church’s suggestion that TREB’s conduct is justified because problems would arise were there mandated public access to TREB data, however, is a red herring: this case is not about mandating that TREB’s assets be available to the public or to some set of third-party rivals. Rather, this case is about whether TREB’s member brokers that already have access to MLS data and that already provide information about those data to their consumers can use a more efficient, and more attractive, means of providing that information to their consumers and thus compete to provide brokerage services in ways that consumers prefer.²⁰⁸

158. Dr. Church also fails to provide any argument or evidence consistent with what economists typically view as a free-riding justification. In particular, Dr. Church fails to provide evidence that brokers will cease to participate in the MLS or reduce their efforts if TREB stops discriminating with respect to how brokers are allowed to compete, and thus permits brokers to provide MLS information to their customers using VOWs rather than less efficient means (e.g., telephone, fax or email).

159. The only evidence that Dr. Church offers fails to provide the support for his free-riding justification that he claims. Dr. Church cites to a 2011 email from GTA agent [REDACTED] to TREB’s president and executive office which reads, “The MLS system is ours. We own it and pay for it. If we give the keys to our house to a burglar, why pay for insurance? Why would the membership continue to pay for maintaining the MLS system, when everyone has access to the information for free? I would rather shut down MLS than pay for someone else to be able to access the information for free and potentially deprive the members of business.”²⁰⁹

160. Although the passage that Dr. Church relies upon might be relevant if this case was an essential facilities case in which TREB’s membership was being asked to provide third-party rivals with access to the MLS, the passage is not relevant to this case in which there are no

an individual or a group of individuals Mandating sharing of the mousetrap, is as Judge Hand observed years ago, akin to urging a firm to win the race, but then penalizing them when they do.” Dr. Church again returns to the idea of mandated access in ¶ 318.

²⁰⁷ Church Report at ¶ 320.

²⁰⁸ Dr. Church, however, does not seem to recognize that brokers already have access to the very information at issue in this case, stating “[t]here is no automatic right that any broker should have access to the assets of TREB or individual agents just because it would lower their costs or allow them to provide a better product than other agents.” [Church Report at ¶ 313]

²⁰⁹ See Church Report at footnote 183, quoting from TREB00003932. Dr. Church cites only a portion of that passage.

essential facilities claims. Moreover, the cited passage also fails to support a free-riding business justification: there is no evidence that this broker intends to reduce effort or levels of service as a result of some free-riding problem. In fact, since it is only MLS members that have access to the MLS data, the passage fails to even show any free-riding in which one party is enjoying the benefits of others' investments.

161. In fact, a more reasonable interpretation of the document that Dr. Church relies upon appears to be that the broker in question (██████████) fears the additional competition that VOWs may create: "I would rather shut down MLS than pay for someone else to be able to access the information for free and *potentially deprive the members of business.*"²¹⁰ More generally, ██████████ email shows a strong resistance on his part to any of the new technology that is transforming how brokers compete in the GTA, stating, "Only by going back to a situation in which the public must get ANY information about a listing or listings directly from a licensed member of a Board can we ensure that *our interests are protected.*" Similarly, in an email that he sent to TREB ten days earlier, ██████████ stated, "I am of the firm opinion, and have been for quite some time now, that we have done ourselves a major disservice in allowing the public to have access to listing information of any kind via the internet, rather than being the *gatekeepers* of that information..."²¹¹

162. It follows that the evidence that Dr. Church cites appears to provide more support for the view that certain GTA brokers have looked to TREB to protect them from increased competition from innovative brokers than it does to support Dr. Church's view that there is a free-riding business justification for TREB's conduct.

163. In discussing why he believes that free-riding concerns provide a business justification for TREB's conduct, Dr. Church also makes the observation that "[e]fficiencies do not result in a substantial lessening of competition, even if they create market power."²¹² There is no disagreement on this point. The important economic point is instead that, while the formation of a cooperative venture such as an MLS can be procompetitive because it creates significant efficiencies that can in turn create market power, care must be taken to then ensure that the venture does not use that market power in anticompetitive ways.²¹³ That, however, is precisely what TREB has done here: used its substantial market power stemming from its control of the MLS to reduce competition among its member brokers relative to the but-for world in which brokers were free to distribute real estate information to consumers using VOWs rather than more traditional means.

²¹⁰ TREB00003932, *emphasis added.*

²¹¹ TREB00047221, *emphasis added.*

²¹² Church Report at ¶ 316.

²¹³ See Vistnes June Report at ¶ 13.

164. Dr. Church also points out that efficiencies are not anticompetitive but fails to recognize that the resulting market power can be used to reduce competition.

B. The need to protect broker profits

165. Dr. Church seemingly suggests that TREB's conduct might be justified if it prevents a reduction in commission rates and prevents innovative brokers from winning market share from their less innovative rivals.²¹⁴ Dr. Church argues that such an outcome would be costly and that brokers that failed to innovate might not earn sufficient profits and might be forced to exit the market and possibly lose money on their historical investments.

166. I do not disagree with Dr. Church that in the face of increased competition, brokers that fail to innovate and keep up with the competitive offerings of their rivals may be forced to exit the market. I also agree with Dr. Church that some of those exiting brokers may lose money. This, however, is a well-recognized aspect of competitive markets: firms that fail to keep up with the competition lose, and this threat of losing provides an important incentive to innovate rather than remain stagnant.²¹⁵ Thus, Dr. Church fails to show that TREB's conduct is justified on the grounds that it protects brokers from competition by more innovative brokers.²¹⁶

C. Preserving the MLS system and "liquidity"

167. Dr. Church suggests that TREB's restrictions are warranted as a means of preserving the MLS system. In particular, Dr. Church asserts that large brokers might withdraw from the MLS if TREB cannot prohibit brokers from using VOWs to provide information to their consumers.²¹⁷

²¹⁴ Church Report at ¶ 319.

²¹⁵ This point is well recognized among economists and competition commentators:

"Competition is a ruthless process. A firm that reduces cost and expands sales injures rivals - sometimes fatally. . . . These injuries to rivals are by-products of vigorous competition, and the antitrust laws are not balm for rivals' wounds."²¹⁵ [*Ball Memorial Hospital, Inc. v. Mutual Hospital Insurance, Inc.*, 784 F.2d 1325, 1338 (7th Cir. 1986).]

"The economic philosophy behind the antitrust laws is a tough philosophy. Those laws recognize that competition means someone may go bankrupt. They do not contemplate a game in which everyone who plays can win." [*Thurman Arnold, Former Assistant Attorney General of Antitrust, United States, as quoted by Congressman Jack Brooks, Address at Symposium in Commemoration of the 60th Anniversary of the Establishment of the Antitrust Division (Jan. 10, 1994).*]

²¹⁶ There is, however, tension between brokers seeking to move forward and compete using new technologies such as VOWs and other brokers that are resistant to that new competition. As stated by CREA's CEO (Simonsen), one of the four principal topics addressed at its 2011 "Futures" project addressing the evolving challenges faced by the Canadian real estate industry" was the "tension that exists in the industry between those who embrace technology and those who do not." [Simonsen (CREA) Statement at ¶¶ 65-67.]

²¹⁷ Once again, Dr. Church appears to premise his analysis on the belief that there would be some form of "mandated access" to the TREB MLS rather than simply requiring that brokers be allowed to use a more efficient, more consumer-friendly way to distribute the same real estate information to which they have always had access. (See Church Report at ¶ 322 referring to "mandated access" changing brokers' incentives to participate in the MLS.)

This is because Dr. Church believes that allowing brokers to use their VOWs to show that information would harm brokers in several different ways. Each of Dr. Church's arguments, however, are flawed.

- *WEST listings*. Dr. Church argues that WEST listings “can easily provide information to buyers regarding the reservation prices of sellers.”²¹⁸ As a result this can give buyers an advantage in negotiations over the transaction price in the future.”²¹⁹ Dr. Church, however, is mistaken. Although providing the buyer with information about WEST listings (i.e., information about *other* homes that are no longer on the market) may help inform the buyer about true market values, it does nothing to inform the buyer about any individual seller's reservation price, i.e., the minimum price that any particular seller would be willing to accept for their own home.²²⁰
- *Pending listings*. Dr. Church argues that making information on pending sales available through VOWs “invites third parties to renegotiate the transaction.”²²¹ Thus, Dr. Church is apparently worried that buyers will monitor pending sales in order to identify homes that are sold for a lower price than that buyer would have been willing to pay for that home. Dr. Church apparently believes those buyers will then contact the seller and try to persuade them to instead sell to them.

In arguing that these fears of renegotiation provide a business justification for TREB's conduct, Dr. Church fails to take into account two critical facts. First, pending sales are typically associated with a contract between the buyer and seller. That contract is not something that can be easily broken should a new party subsequently emerge and offer to pay the seller more money. Second, brokers already provide information to consumers about pending sales, and thus the type of renegotiations that Dr. Church fears are *already* possible. Yet, Dr. Church provides no evidence that such attempts to persuade sellers to break existing contracts are common. Nor does he provide any evidence that buyers who engage in this conduct are successful in breaking existing contracts.²²²

²¹⁸ A seller's “reservation price” is the minimum price that the seller would be willing to accept from the buyer.

²¹⁹ Church Report at ¶ 327. This is one of the only points in Dr. Church's report where he discusses the competitive significance of WEST listings.

²²⁰ Perhaps Dr. Church means to suggest that access to WEST listings would provide a buyer with information about the history of a home that was previously on the market, then pulled and re-listed so as to make the home seem “fresh.” If so, I agree. VOWs can, in fact, help prevent this type of misleading conduct and give buyers more accurate information about a home in which they are interested in purchasing.

²²¹ Church Report at ¶ 327.

²²² Of course, even if this conduct were rampant, the appropriate fix would likely be to strengthen contracts to prevent such conduct rather than seek to prevent that conduct through the more draconian “fix” of preventing VOWs from providing information about pending sales.

Dr. Church also argues that “information on pending sales is very valuable to a number of businesses that provide services for new home owners or individuals moving out of a home. Making pending sales information [sic] invites home owners and sellers to be targets of unsolicited approaches to provide services. These may be excessive and intrusive.”²²³ Dr. Church’s observation about the effects of making pending listings available to third-parties, such as moving companies may be quite true. The observation, however, is irrelevant. This litigation is not over whether TREB must make listings information available to third-parties that are not working with a broker.²²⁴ This litigation is over whether TREB can discriminate against certain brokers by prohibiting brokers that already have access to MLS information from using VOWs to provide this information to their customers.

- *Sold data.* Dr. Church offers his observation that “[s]ome home buyers and sellers may not want this [sold data] to be as readily available as it would be on a VOW.”²²⁵ Dr. Church provides absolutely no evidence, however, that buyers or sellers have strong opinions in this regard, or that the threat of having that information available over VOWs (rather than through telephone, fax, email and other more traditional means of delivery) would be so important that buyers and sellers would pull their listings from an MLS rather than have that information available on a VOW.²²⁶

168. While there is little doubt that the MLS system provides substantial benefits that significantly lower brokers’ costs of providing services and allows them to provide more attractive services to consumers, there is no evidence that TREB’s restrictions are necessary to preserve that system or ensure brokers continued participation in the MLS.²²⁷ As Dr. Church notes, brokers realize significant benefits from participating in an MLS:

“Exposure to the largest possible audience maximizes the chances of successfully selling a property.”²²⁸

²²³ Church Report at ¶ 327. This is one of the only points in Dr. Church’s report where he discusses the competitive significance of pending listings.

²²⁴ Curiously, Dr. Church fails to note that Realtor.ca, by making information available to *any* party (regardless of whether they are consumers working with a broker to either buy or sell real estate) already makes it easy for moving companies and other businesses to make those unsolicited approaches that he fears could cause significant harm to the MLS system.

²²⁵ Church Report at ¶ 327.

²²⁶ I have seen no evidence that such concerns have prompted buyers or sellers to ask that their listings be pulled from MLS systems in other areas in which VOWs make that information available.

²²⁷ In fact, one broker who submitted a Witness Statement on behalf of TREB noted that “We think that if the consumer grants informed permission to use the information, then everything should be accessed [by a broker’s VOW], including listings that are sold, pending sold (however they would have to be removed if the deal doesn’t close), withdrawn, expired, terminated, suspended and the cooperating brokers offer of commission.” (Sage Statement (Sage Real Estate) at ¶ 15.)

²²⁸ Church Report at ¶ 39.

“[T]he MLS platform serves to greatly expand the options available to buyers and sellers, reduces their transaction costs, and increase competition among agents to supply brokerage services”²²⁹

169. These benefits mean that any broker who withdrew from TREB’s MLS would face a significant competitive disadvantage: that brokers’ sell-side customers would find it much more difficult to sell their home if it was not listed in the MLS, and the broker’s buy-side customers would find it difficult to find a home if they were unable to search the MLS. These disadvantages would accrue to even the largest brokers (and even franchise brokers) in the GTA.²³⁰ As a result, Dr. Church’s speculation that brokers would withdraw from TREB’s MLS is highly unlikely.²³¹

170. Dr. Church’s suggestion that TREB’s conduct is justified as a means of protecting the MLS is also inconsistent with the observation that, in areas in which brokers are permitted to use VOWs to provide real estate information to their consumers, MLSs have not become destabilized, and there is no apparent evidence of widespread broker withdrawal from the MLS.²³² For example, brokers in Nova Scotia show many of the excluded data fields on their VOWs, yet I am aware of no evidence that the Nova Scotia MLS has become destabilized. Similarly, brokers throughout the U.S. can now use their VOWs to provide the excluded data fields, yet I am not aware of any MLS in the U.S. that has fallen apart or been significantly weakened as a result.²³³

²²⁹ Church Report at ¶ 89.

²³⁰ To put this in perspective, consider Brokerage E, the largest franchise broker in the GTA. If Brokerage E were to pull out of the MLS, its buy-side customers would immediately lose the ability to search approximately 70 percent of homes for sale, and its sell-side customers would fail to get their home noticed by approximately 70 percent of buyers. This would leave Brokerage E at a substantial competitive disadvantage relative to other competing brokers that could offer buyers and sellers access to a far larger pool of listings and buyers. That disadvantage would likely result in a substantial loss of Brokerage E market share, which would then further reduce the pool of listings that its buyers could see and the set of buyers that its sellers could market to. Thus, pulling out of the MLS would likely result in a type of “death spiral” in which even the largest broker would quickly lose market share. The likelihood of such a death spiral likely explains why I am unaware of any significant brokerages that have opted to withdraw from an existing MLS (except in the unusual situation where there is an alternative MLS to which they can switch).

²³¹ Dr. Church notes that there are some countries in which there is no MLS. (See, e.g., Church Report at ¶¶ 40 and 47.) There is no dispute that brokers can compete against each other when none of those brokers has access to an MLS. This is hardly evidence, however, that brokers would willingly withdraw from an existing MLS, and thus incur a disadvantage relative to those other brokers that would continue to have access to their existing MLS.

²³² This is not to say that there may not have been scattered withdrawal by individual brokers. I am aware of no cases, however, where any significant broker has withdrawn from an MLS and managed to prevent consumers from switching to other brokers that maintained their MLS participation.

²³³ I am also unaware of any evidence that TREB’s decision in 2011 to allow VOWs has significantly weakened its MLS or caused any significant de-participation on the part of any brokerage. Yet, even though VOWs are still prohibited from showing the excluded data fields, many of Dr. Church’s arguments about why one would expect harm from allowing VOWs to show the excluded data fields seemingly also apply to VOWs being used to show any type of information. Thus, the survival of TREB’s MLS following the introduction of VOWs speaks to its likely continued survival if those VOWs can also be used to show the excluded data fields.

D. Costs of providing and stopping unauthorized access

171. Dr. Church argues that copyright considerations provide a basis for TREB's restrictions. Dr. Church appears to base his arguments here on the assumption that TREB is being asked to give consumers direct access to the MLS database but that "providing access to non TREB members to search the MLS database would be expensive for TREB."²³⁴

172. Dr. Church's arguments here are based on a flawed assumption: TREB is not being asked to provide a new data feed that consumers can directly access. Rather, TREB is being asked to include additional data (WEST listings, sold listings, pending sales and buyer commission offers) in the existing VOW data feed that it already makes available to consumers. Yet Dr. Church provides no estimates of the incremental cost of providing those data,²³⁵ nor any basis to believe that these additional costs would be so great as to justify the reduction in competition that is attributable to TREB's restrictions.²³⁶

E. TREB's non-profit status

173. While not offered explicitly as a business justification, Dr. Church argues that TREB's non-profit status helps guard against the exercise of market power.²³⁷ In doing so, he argues against the economic literature that demonstrates that competition concerns also apply to non-profit firms and that even non-profits can be expected to use market power to raise price and reduce competition in ways that harm consumers.²³⁸ Thus, a firm's non-profit status does not provide any type of guarantee against market power.

²³⁴ Church Report at ¶ 337.

²³⁵ I understand, for example, that TREB has recently decided that it can add certain (non-confidential) data fields to its VOW datafeed that had previously been excluded (e.g., information regarding open houses). I am not aware that the costs of providing those additional data feeds was so substantial that TREB found it necessary to increase its charges to members to recover those costs.

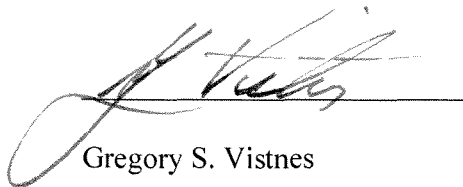
²³⁶ Dr. Church also fails to consider another basic question: even if there were significant costs of providing the excluded data fields in its VOW data feed, why can't TREB simply impose a cost-based charge to brokers seeking a VOW data feed in order to recover those costs?

²³⁷ See, for example, Church Report at ¶¶ 12, 170, 171, and 248 in which he appears to suggest that, as a non-profit, TREB may not seek to exercise its market power.

²³⁸ See, for example, Tomas Philipson and Richard Posner: "There are three major categories of antitrust activity in the NFP [not-for-profit] sector. The first involves trade and professional associations and cooperatives. Although these entities are usually organized in the NFP form, *they are agents of FP [for-profit] firms and individuals, and the courts sensibly pierce the NFP label and treat them as functionally FP entities.*" Those authors further conclude, "the same incentives to restrain trade exist in the nonprofit sector as in the for-profit sector." ("Antitrust in the Not-For-Profit Sector," National Bureau of Economic Research working paper 12132, March 2006, at pp. 3 and 27, *emphasis added*) See also the extensive economic literature in the context of non-profit hospital mergers in the U.S.. The general consensus of that literature is that even non-profits are likely to exercise market power to the detriment of consumers. See, for example, Emmett B. Keeler, Glenn Melnick, and Jack Zwanziger, "The Changing Effects of Competition on Non-Profit and For-Profit Hospital Pricing Behavior," *Journal of Health Economics* 18, no. 1 (1999): 69–86; David Dranove and Richard Ludwick, "Competition and Pricing by Nonprofit Hospitals: A

174. More generally, Dr. Church's suggestion that TREB's non-profit status helps ensure that TREB's conduct is not anticompetitive ignores the fact that, as Dr. Church notes, TREB "is a non-profit cooperative *run for the benefit of its members.*"²³⁹ As long as TREB is run for the benefit of its for-profit members, TREB's non-profit status is of little or no economic significance.

I declare the foregoing is true and correct.



Gregory S. Vistnes

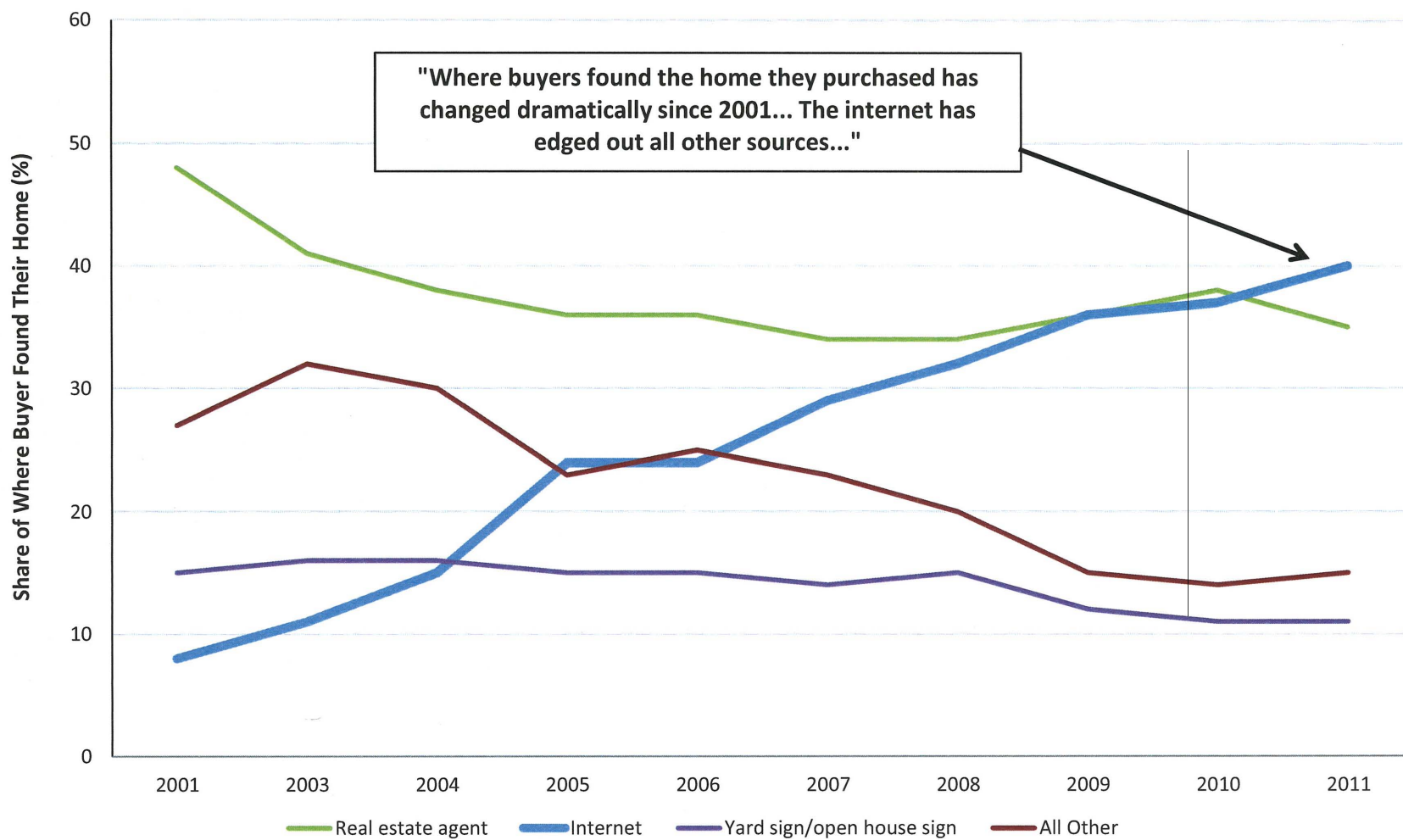
Washington, D.C.

August 23, 2012

Reassessment of Lynk's Analysis," *Journal of Health Economics* 18, no. 1 (1999), 87-98; and Capps, et. al, "Antitrust Treatment of Nonprofits: Should Hospitals Receive Special Care," working paper, August 2010.

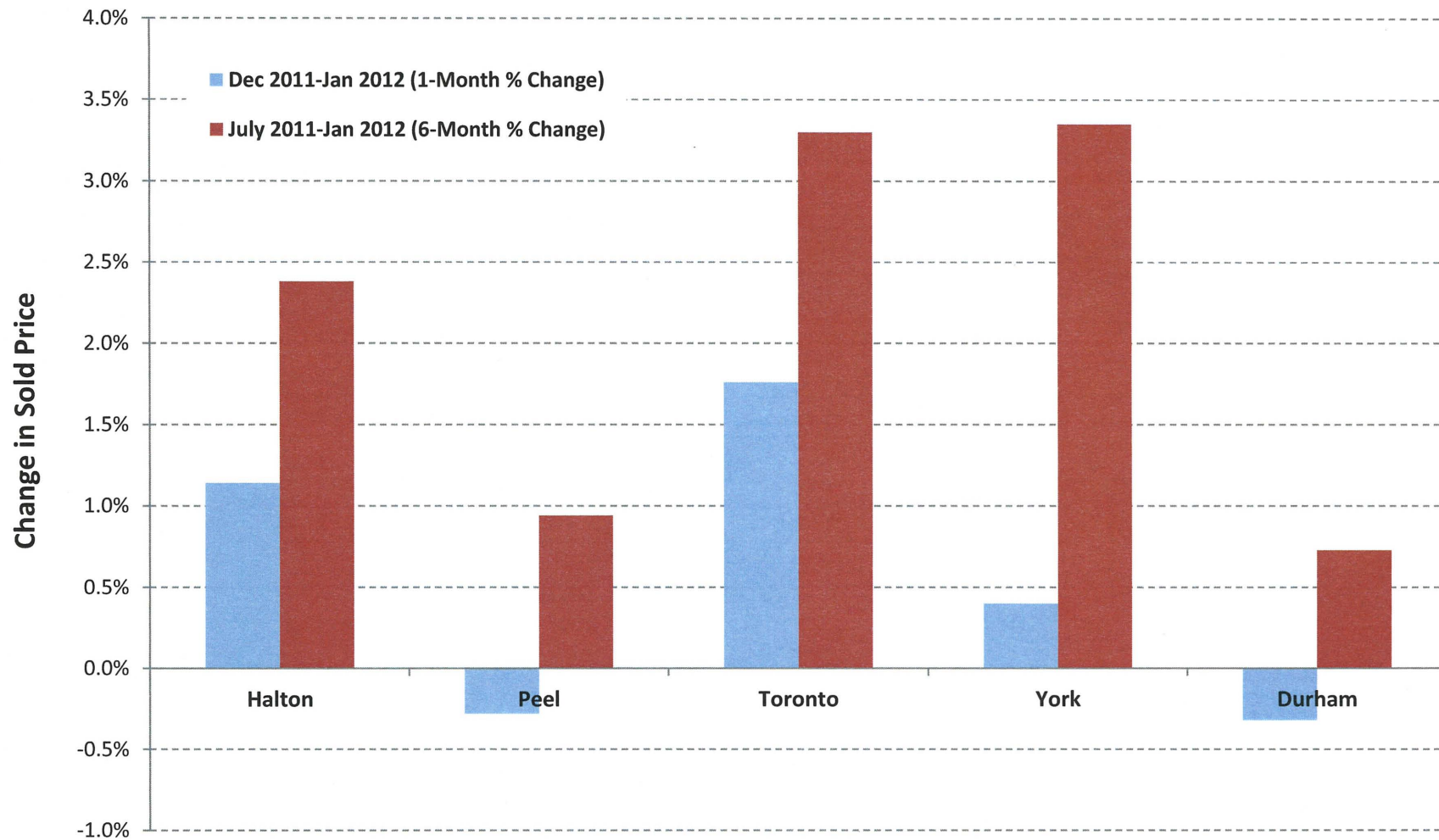
²³⁹ Church Report at ¶ 170, *emphasis added*.

**Exhibit A: Where Buyer Found the Home They Purchased
2001-2011**



Source: "Profile of Home Buyers and Sellers," NAR, 2011, pages 43 and 50.

**Exhibit B: TREB's MLS Home Price Index Percentage Changes
Single Family Homes**



Source: TREB's estimates reported in "GTA REALTORS® Introduce MLS® Home Price Index" (February 6, 2012), available at http://www.torontorealestateboard.com/market_news/release_market_updates/news2012/nr_HPI_announcement_0212.htm

Exhibit C

Hedonic Regression Models

Dep. Var = Log of Sold Price	With Interaction with Pending Dummy					
	(1) GTA	(2) Toronto	(3) Mississauga	(4) Brampton	(5) Markham	(6) Vaughan
Feb-11	0.01988*** (0.00437)	0.03766*** (0.00831)	0.00588 (0.01396)	0.01728** (0.00786)	0.03543** (0.01554)	0.00755 (0.01530)
Mar-11	0.02983*** (0.00407)	0.04567*** (0.00773)	0.01348 (0.01255)	0.02571*** (0.00728)	0.04533*** (0.01424)	0.01175 (0.01450)
Apr-11	0.03903*** (0.00406)	0.06316*** (0.00774)	0.02284* (0.01275)	0.04789*** (0.00726)	0.05131*** (0.01344)	0.02370 (0.01467)
May-11	0.05709*** (0.00403)	0.07315*** (0.00747)	0.04157*** (0.01249)	0.05481*** (0.00729)	0.07396*** (0.01337)	0.03701** (0.01498)
Jun-11	0.05957*** (0.00407)	0.07216*** (0.00764)	0.04205*** (0.01256)	0.06285*** (0.00745)	0.07611*** (0.01330)	0.04409*** (0.01515)
Jul-11	0.05239*** (0.00420)	0.05596*** (0.00795)	0.02903** (0.01302)	0.07029*** (0.00766)	0.08968*** (0.01372)	0.03976** (0.01552)
Aug-11	0.05384*** (0.00426)	0.05368*** (0.00811)	0.03677*** (0.01325)	0.06862*** (0.00828)	0.08410*** (0.01430)	0.03855** (0.01507)
Sep-11	0.05729*** (0.00423)	0.06101*** (0.00786)	0.04072*** (0.01333)	0.06434*** (0.00770)	0.08163*** (0.01439)	0.05372*** (0.01549)
Oct-11	0.06615*** (0.00426)	0.07826*** (0.00802)	0.03537*** (0.01283)	0.07058*** (0.00783)	0.07906*** (0.01435)	0.07649*** (0.01514)
Nov-11	0.06796*** (0.00439)	0.08275*** (0.00811)	0.04162*** (0.01429)	0.06130*** (0.00790)	0.09358*** (0.01561)	0.08623*** (0.01569)
Dec-11	0.06456*** (0.00499)	0.07725*** (0.00921)	0.05341*** (0.01533)	0.06379*** (0.00821)	0.08885*** (0.01660)	0.08044*** (0.01847)
Jan-12	0.04712*** (0.00642)	0.06483*** (0.01285)	0.05498*** (0.01845)	0.06566*** (0.00990)	0.04600** (0.02261)	0.06968*** (0.02195)
Feb-12	0.05336*** (0.01352)	0.04632* (0.02509)	0.03499 (0.03370)	0.11128*** (0.02924)	0.13188*** (0.02963)	0.12838 (0.09452)
Jan-12 * Pending Dummy	0.05561*** (0.00681)	0.06278*** (0.01394)	0.01755 (0.01931)	0.02993*** (0.01129)	0.08278*** (0.02483)	0.05332** (0.02222)
Feb-12 * Pending Dummy	0.05511*** (0.01375)	0.09521*** (0.02587)	0.06617* (0.03589)	-0.01241 (0.02976)	-0.01231 (0.03098)	-0.01515 (0.09493)
Controls for House Characteristics?	Yes	Yes	Yes	Yes	Yes	Yes
Community Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes
Observations	64,080	19,421	6,274	7,615	3,831	3,639
R-squared	0.82824	0.82413	0.73371	0.77496	0.77584	0.73803

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Notes:

Analysis based only on sold or pending transactions in Jan 2011 - Feb 2012.

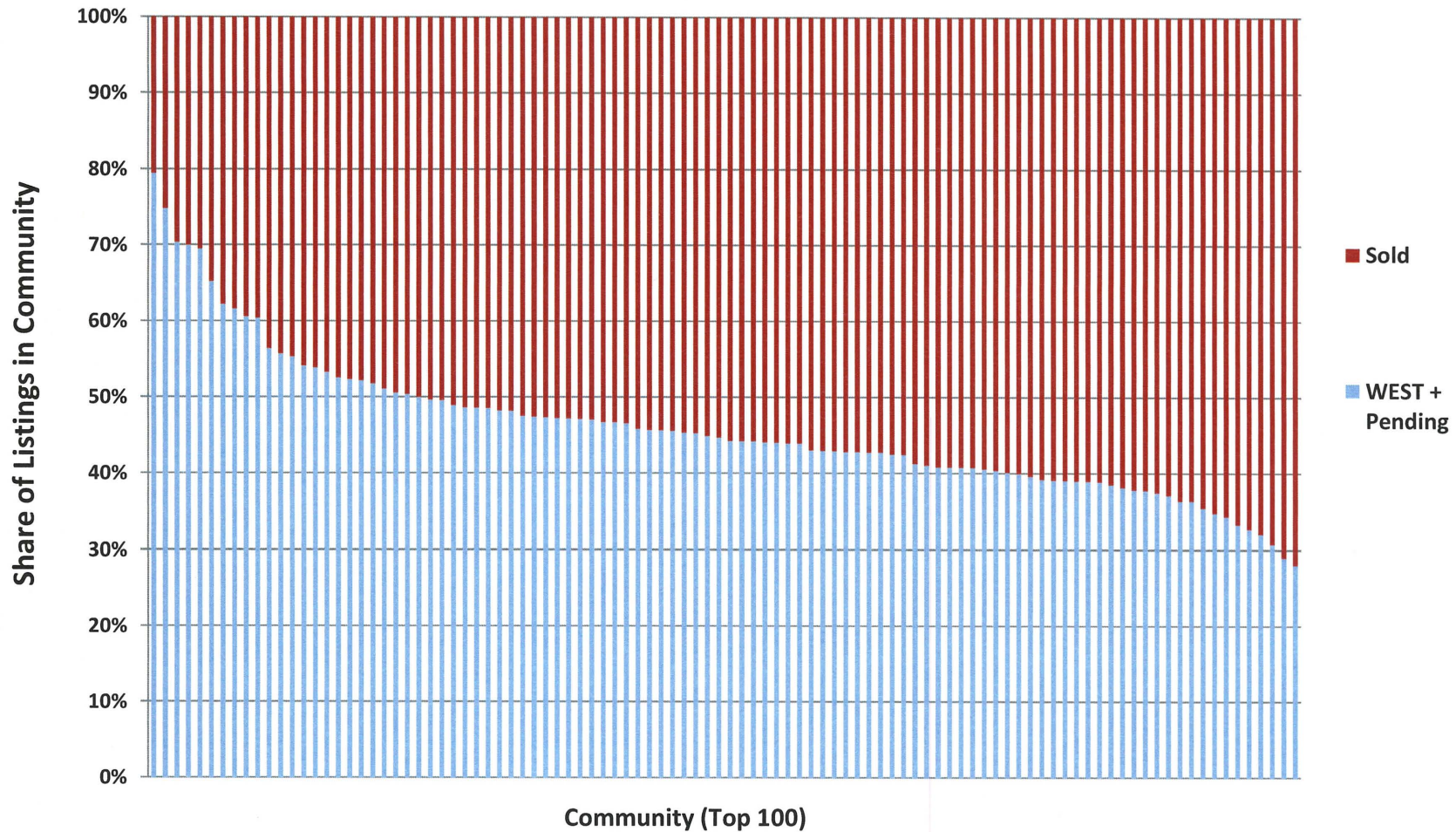
Records in the top and bottom 0.5% of the price distribution (by year) excluded.

Pending transactions consist of the following transactions:

- transactions for which "Last Status" = "Sold Conditionally"

- transactions for which "Last Status" = "Sold" & "Closing Date">2/29/2012

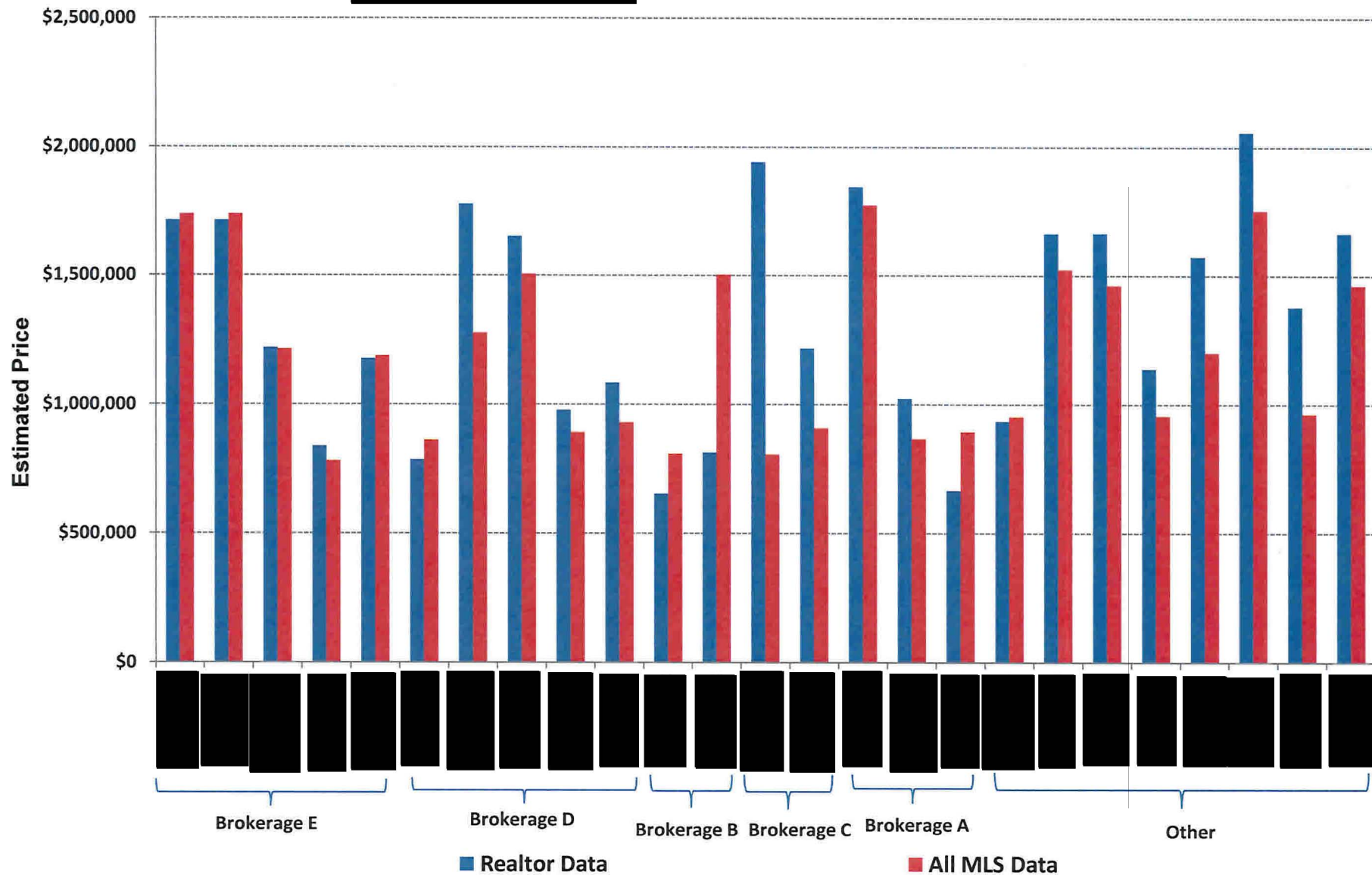
Exhibit D: Distribution of Listings by Community - Top 100 Communities
Window: Sep 2011 to Feb 2012*



Notes: * Based on transactions for which "Date of Last Update" >= September 1, 2011. Pending transactions consist of (1) records for which "Last Status" = "Sold Conditionally"; (2) records for which "Last Status" = "Sold" and "Closing Date">2/29/2012. Sold transactions consist of records for which "Last Status" = "Sold" and "Closing Date"<=2/29/2012. WEST transactions consist of records for which "Last Status" is "Expired", "Terminated", or "Suspended". The MLS database does not have a category for "withdrawn" listings. Top 100 communities based on Sold, Pending, and WEST listings with "Date of Last Update" >= September 1, 2011

Exhibit E.1: Comparison of Price Estimates: Full vs. Limited Data Samples

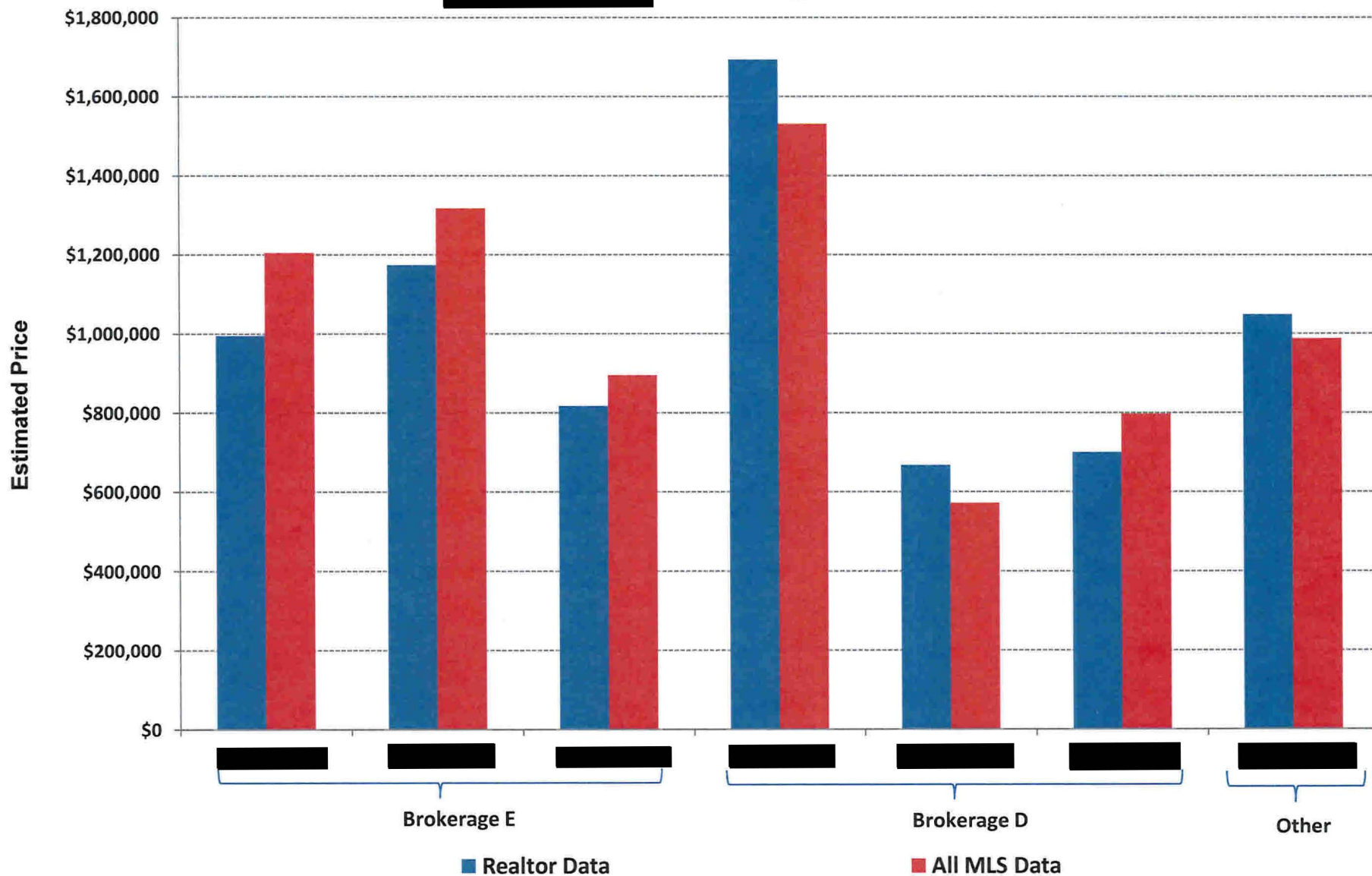
[Redacted], Toronto - Sold Listings in January 2012



Source: Analysis based on MLS data.

Exhibit E.2: Comparison of Price Estimates: Full vs. Limited Data Samples

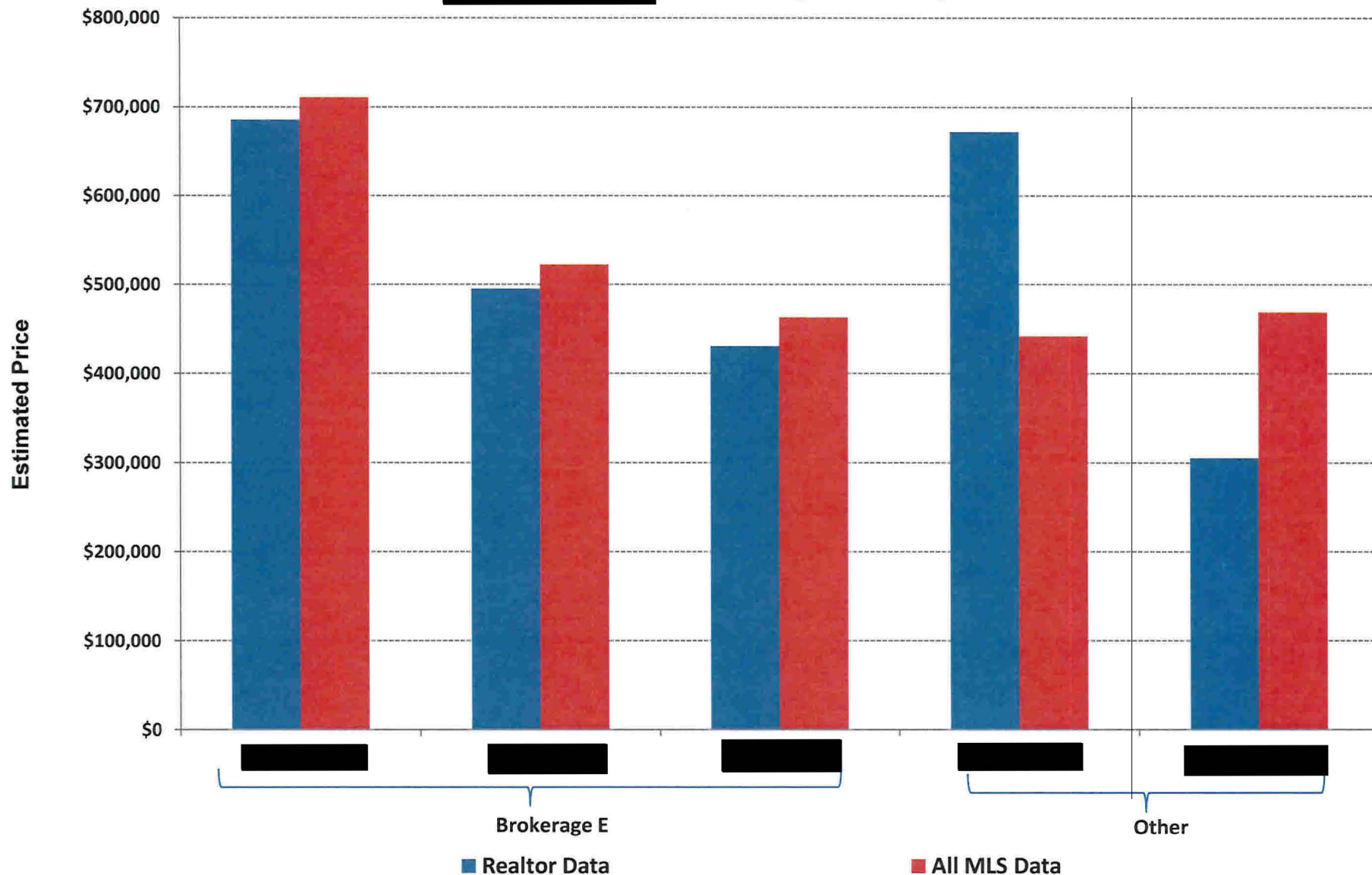
[Redacted] - Sold Listings in January 2012



Source: Analysis based on MLS data.

Exhibit E.3: Comparison of Price Estimates: Full vs. Limited Data Samples

[Redacted] - Sold Listings in January 2012



Source: Analysis based on MLS data.

Exhibit F

Prediction Errors: Estimating January 2012 Sale Prices using the Full MLS Database versus MLS Database Restricted to Individual Brokerage Firms

Community	Brokerage E	Brokerage D	Brokerage B	Brokerage C	Brokerage A	Others
Action	4.0%	3.8%				8.9%
Agincourt North	6.1%		7.4%	4.1%		8.7%
Agincourt South-Malvern West	4.5%		24.7%	12.1%	65.0%	48.4%
Aileen-Willowbrook	9.2%			11.1%		8.9%
Aldenwood	12.7%	26.8%	88.6%		14.6%	18.1%
Alton - Burlington	19.9%	4.5%	17.7%		6.7%	8.9%
Alton - Caledon						8.9%
Amberlea	2.0%	6.3%	2.3%		2.8%	25.1%
Angus Glen	5.0%					8.9%
Annex	8.7%	12.4%	5.9%			10.8%
Apploby	15.9%					8.9%
Applewood	2.8%	16.4%	5.9%	4.1%	4.0%	5.6%
Armitage	1.3%	5.1%	32.0%		10.1%	
Aurora Estates	122.0%	4.5%			6.7%	8.9%
Aurora Grove				56.3%		8.9%
Aurora Heights			23.8%		29.0%	19.1%
Aurora Highlands		3.0%	21.4%	32.2%		2.2%
Aurora Village	6.6%	8.9%				8.9%
Avondale	10.2%	3.3%	4.1%	4.1%		21.8%
Baldwin	32.8%		5.9%			
Ballantrae		4.0%				22.1%
Banbury-Don Mills	0.8%	7.0%	31.2%	4.1%	6.7%	71.2%
Bathurst Manor	4.2%		20.6%	12.6%		15.9%
Bay Ridges	7.9%		16.2%		6.7%	2.5%
Bay Street Corridor	2.8%	4.5%	5.9%	4.1%		8.9%
Bayview Fairway-Bayview Country Club Est	19.4%					
Bayview Glen	17.3%					
Bayview Hill			9.6%			8.9%
Bayview Northeast	11.5%		3.7%		6.1%	13.0%
Bayview Village	3.8%	4.5%	5.9%		6.7%	8.9%
Bayview Wellington	1.1%	4.4%	4.9%	6.9%		7.6%
Bayview Woods-Steeles	1.0%		31.7%			8.9%
Bealy	2.4%	2.9%			3.5%	2.4%
Beaver Creek Business Park			5.9%	4.1%		
Beaverton	18.4%	4.5%	3.7%			
Bedford Park-Nortown	1.0%	8.5%	44.9%	92.8%	10.8%	16.2%
Beechborough-Greenbrook		4.5%	5.9%		6.7%	
Belhaven						8.9%
Bendale	2.2%	2.4%	8.8%	4.9%	8.9%	15.2%
Bercozy	1.2%		7.6%	4.1%	12.2%	1.2%
Beverly Glen	2.9%	4.5%	22.8%	35.8%	24.4%	6.3%
Birchcliffe-Ciliffside	3.1%	3.4%	9.6%	45.8%		14.7%
Black Creek	2.8%			3.0%	30.1%	27.7%
Blackstock		4.5%			6.7%	
Blake-Jones		0.5%				7.8%
Blue Grass Meadows	3.3%	0.0%	16.3%			16.1%
Bolton East	2.5%	2.9%				
Bolton North		4.5%	63.0%			
Bolton West	1.4%	1.0%		4.4%	49.8%	52.4%
Bowmanville	2.6%	3.0%	6.2%	0.5%	28.0%	3.1%
Box Grove	2.9%		5.9%	9.5%		70.6%
Bram East	1.4%	2.5%	3.4%	1.1%		4.5%
Bram West	4.2%	17.6%	2.2%		5.8%	26.9%
Bramalea North Industrial	3.1%					
Brampton East	4.6%	2.1%	4.2%	70.0%		99.9%
Brampton North	1.0%	3.2%	2.3%	13.6%		3.2%
Brampton South	3.0%					8.9%
Brampton West	1.3%		3.5%	19.7%	2.6%	7.4%
Brant Hills	8.1%			4.1%		8.9%
Brier Hill-Belgravia		11.6%	2.7%	39.6%	6.7%	8.6%
Bridle Path-Sunnybrook-York Mills						8.9%
Bristol-London	7.6%		2.0%		2.9%	2.5%
Broadview North				4.1%		28.9%
Brock Ridge	11.8%		7.3%			
Bronte East	36.0%	20.0%	32.7%			35.6%
Bronte Meadows	2.8%		5.9%			8.9%
Bronte West	2.8%	11.5%	11.0%		313.8%	79.0%
Brookhaven-Amesbury		4.1%		4.1%	3.0%	8.9%
Brooklin	3.7%	0.3%		11.1%	6.5%	6.4%
Brownridge	2.8%	12.7%	4.3%	4.5%	6.8%	8.9%
Bullock	8.3%		21.8%			37.9%
Buttonville						8.9%
Cabbagetown-South St. James Town	2.8%	4.5%	5.9%	4.1%		8.9%
Cachet	7.4%					
Caledon East		63.9%				8.9%
Caledonia-Fairbank	4.1%	7.1%	12.6%	33.1%	30.3%	
Campbellville						8.9%
Cannington					10.1%	
Casa Loma		63.2%			6.7%	8.9%
Cathedraltown	2.5%		12.5%			
Cedarwood	3.7%		3.4%	5.4%		
Centennial	3.3%	1.5%	14.3%			15.9%
Centennial Scarborough		4.1%	5.8%			8.9%
Central - Ajax	1.5%	6.8%	3.1%		4.2%	2.8%
Central - Oshawa	2.9%	35.4%			4.6%	18.3%
Central East	2.2%					22.5%
Central Erin Mills	2.1%	4.5%		23.8%		15.2%
Central Newmarket	3.4%	13.6%	7.6%		4.8%	13.9%
Central Park	2.4%	10.5%	3.1%	2.7%	2.3%	3.7%
Central West	1.7%	11.2%	4.3%	4.0%		12.0%
Cheiltenham			5.9%			
Church-Yonge Corridor	2.8%	4.5%	5.9%	4.1%	6.7%	8.9%
Churchill Meadows	1.2%	2.1%	5.9%	4.1%	0.5%	2.4%
City Centre	2.8%	4.5%	5.9%	4.1%	6.7%	8.9%
Clairlea-Birchmount	3.5%	11.7%	9.6%	1.3%		24.3%
Clanton Park	2.8%				5.1%	20.8%
Clarke	2.2%	1.6%	8.4%			5.8%
Clarkson	2.8%	4.5%	5.9%	4.1%	6.7%	8.9%
Cleanview	2.5%	0.9%				
Cliffcrest			15.9%	11.4%		8.9%
Coates	0.6%	2.5%	0.7%		7.5%	7.1%
College Park	38.3%	4.5%			90.8%	55.3%
Commerce Valley	3.0%		5.9%	4.1%		8.9%
Concord	0.4%					
Cooksville	4.8%	8.5%	11.5%	14.5%		2.3%
Cornell	1.7%	8.9%	5.2%	3.4%		5.0%
Corso Italia-Davenport	4.8%	10.4%		38.9%	50.6%	13.7%
Courtice	3.1%	1.6%	4.5%		6.7%	7.4%
Credit Valley	3.2%	1.9%	9.0%		27.1%	8.1%
Creditview	9.6%	4.5%			18.2%	4.1%
Crescent Town	23.0%	8.7%	5.9%	4.1%		
Crestwood-Springfarm-Yorkhill	8.2%	5.4%	6.8%	4.8%	0.0%	6.0%
Crosby	0.8%			3.4%		19.1%
Danforth	5.2%	5.0%				16.3%

Exhibit F
Prediction Errors: Estimating January 2012 Sale Prices using the Full MLS Database versus MLS Database Restricted to Individual Brokerage Firms

Community	Brokerage E	Brokerage D	Brokerage B	Brokerage C	Brokerage A	Others
Danforth Village-East York	4.2%	8.2%	9.4%	32.3%		46.2%
Dempsey	2.8%	1.6%				7.0%
Devonsleigh	0.5%	3.4%		4.1%		8.9%
Dikle						8.9%
Don Valley Village	2.8%	0.6%	2.9%	1.0%		8.9%
Doncrest	7.7%					
Donevan	2.7%	6.3%	6.4%			9.2%
Dorset Park - Milton		15.3%				8.9%
Dorset Park - Toronto	4.1%	4.5%	5.9%	10.8%	6.7%	8.9%
Dovercourt-Wallace Emerson-Junction	5.4%	5.3%	17.9%	6.6%	6.7%	15.3%
Downsview-Roding-CFB	2.3%	8.8%	4.3%	2.8%		17.6%
Downtown Brampton	4.6%	7.1%				8.9%
Downtown Whitby	16.8%	0.6%		4.1%	36.0%	14.1%
Dufferin Grove	7.6%					69.2%
Dunbarton				4.1%		
East Credit	1.7%	1.9%	2.9%	5.4%	3.1%	1.2%
East End-Danforth	2.0%	3.7%		104.8%		46.2%
East Woodbridge	2.1%	6.7%		8.9%	0.2%	4.4%
East York	4.8%				43.6%	39.6%
Eastdale	2.2%		2.3%			11.2%
Eastlake		21.7%				
Edenbridge-Humber Valley	5.9%	4.5%				72.5%
Eglinton East	0.8%	62.6%	5.9%	14.1%		8.9%
Elder Mills	3.5%	2.4%		4.1%		
Elme-Old Rexdale	2.8%	61.8%	5.9%		6.7%	
Englemount-Lawrence	17.1%	21.4%				35.5%
Erin Mills	1.5%	2.5%	10.6%			8.9%
Erlindale	11.7%	37.6%	78.7%	12.2%	9.5%	5.9%
Eringate-Centennial-West Deane	2.8%	6.0%	8.5%			5.9%
Etobicoke West Mall		4.5%	5.9%		6.7%	25.4%
Fairview	4.3%	13.5%				
Farewell		4.5%				
Flemington Park	2.8%	4.5%	5.9%			8.9%
Fletchers Creek South	3.7%		5.8%		8.5%	3.8%
Fletchers Creek Village	2.6%	9.0%	17.3%	1.9%		7.1%
Fletchers Meadow	0.7%	2.7%	1.0%	1.2%	1.6%	1.9%
Fletchers West	31.3%	1.3%	3.1%	1.6%	1.7%	4.5%
Forest Hill North	2.8%					8.9%
Forest Hill South		4.5%				8.9%
Georgetown	0.9%	2.1%	5.9%			13.5%
German Mills	10.4%			4.1%		8.9%
Glen Abbey	3.1%	1.9%	12.6%		6.7%	8.9%
Glen Shields	6.4%	30.5%	0.6%			2.3%
Glen Williams		4.5%				
Glenfield-Jane Heights	0.9%		5.9%	4.1%		5.4%
Glenway Estates		3.7%				3.9%
Gore Industrial North			10.1%	4.1%	6.7%	
Goreway Drive Corridor	3.7%		5.9%	4.1%		
Gorham-College Manor	2.0%	1.4%			15.0%	12.4%
Grandview				66.0%		8.9%
Greensborough	0.8%	2.5%	0.5%	2.6%	6.7%	12.8%
Greenwood-Coxwell	6.4%	9.7%	10.7%	2.4%	39.1%	8.0%
Guildwood	10.1%	10.9%	17.8%	4.1%	6.7%	8.9%
Harding	6.7%	172.6%	5.9%	4.1%		8.9%
Harrison	5.2%	4.9%			6.7%	8.9%
Headon	2.8%				6.7%	8.9%
Heart Lake		4.5%				
Heart Lake East	3.0%	3.7%	4.1%			8.9%
Heart Lake West	1.7%		3.0%	6.9%		5.5%
Henry Farm	6.5%		5.9%	4.1%		8.9%
High Park North	8.8%	1.3%			15.8%	8.9%
High Park-Swansea	13.3%	5.3%	5.9%	4.1%	26.2%	8.9%
Highbush	9.6%		6.7%			
Highland Creek	8.8%		4.7%	12.9%	51.8%	3.9%
Highway 427				4.1%		
Hillcrest Village	2.2%		5.9%	4.1%		8.9%
Hills of St Andrew	16.6%					
Historic Lakeshore Communities	4.1%	22.7%				24.0%
Holland Landing	2.8%	2.4%	3.3%			
Humber Heights	11.0%	3.6%		4.1%		8.9%
Humber Summit		11.8%	9.8%	4.1%		34.1%
Humberlea-Palmo Park W4	11.2%					8.9%
Humberlea-Palmo Park W5	19.3%			4.1%	6.7%	8.9%
Humbermede	4.6%		5.9%	32.6%		24.3%
Humewood-Cedarvale	9.8%	7.4%		4.1%	5.9%	4.2%
Huron Heights-Leslie Valley		3.8%		68.8%	17.2%	7.9%
Hurontario	2.8%	4.5%	5.9%	4.1%	6.7%	8.9%
Inglewood				4.1%		8.9%
Ionview	2.0%		5.9%			
Iroquois Ridge North	6.1%	2.6%		28.9%		33.3%
Iroquois Ridge South	2.8%					8.9%
Islington Woods	37.5%	19.7%			6.7%	8.9%
Islington-City Centre West	2.0%	3.9%	21.4%		6.6%	17.7%
Jefferson	5.9%	0.8%	3.3%	1.6%	1.8%	9.0%
Junelton Area	2.8%	3.6%	5.9%	12.3%		8.9%
Kedron	67.1%				6.7%	
Keeleesdale-Eglinton West	5.6%	4.5%	5.9%		14.6%	12.3%
Kennedy Park	3.3%		19.5%	19.6%		8.9%
Kensington-Chinatown	2.8%	4.5%				8.9%
Keswick North	18.4%					11.4%
Keswick South	6.5%	3.7%	3.5%		18.8%	9.0%
King City	0.4%		5.9%	4.1%		8.9%
Kingsview Village-The Westway	8.2%		5.9%	29.3%		16.9%
Kingsway South	9.0%	2.9%		4.1%		
L'Amoreaux	4.6%		7.0%	3.1%	6.7%	16.4%
LaSalle		4.5%			6.7%	8.9%
Lakaview - Mississauga	3.8%	4.5%	5.9%		0.2%	4.6%
Lakeview - Oshawa	5.6%	7.9%	1.8%		4.1%	2.5%
Lakeview Estates					6.7%	10.9%
Langstaff	1.0%	9.7%	6.1%	4.1%		31.3%
Lansing-Westgate	7.7%	4.5%	9.7%	4.1%	6.7%	66.2%
Lawrence Park North	3.2%	3.6%				10.7%
Lawrence Park South	3.6%	0.3%	5.9%			33.8%
Leaside	3.5%	21.4%				19.2%
Legacy						8.9%
Limehouse	2.8%					
Lisgar	0.2%	1.3%		3.5%	0.4%	1.2%
Little Portugal		16.0%				5.7%
Liverpool	1.6%	8.5%	5.9%			
Long Branch	5.5%	43.4%			92.4%	103.8%
Lorne Park	11.0%	14.3%				6.0%
Lynde Creek	5.9%	7.9%	12.8%	4.1%	7.2%	7.1%
Madoc	3.4%	5.2%	5.9%	3.1%	7.3%	7.2%
Malton	0.7%	17.2%	2.4%	1.2%	0.4%	1.2%

Exhibit F
Prediction Errors: Estimating January 2012 Sale Prices using the Full MLS Database versus MLS Database Restricted to Individual Brokerage Firms

Community	Brokerage E	Brokerage D	Brokerage B	Brokerage C	Brokerage A	Others
Malvern	2.0%	4.5%	9.8%	6.6%	6.7%	16.6%
Maple	6.3%	3.2%	3.2%	2.0%	4.1%	6.3%
Maple Leaf	1.6%	8.7%	5.9%			28.9%
Markham Village	0.9%	18.9%	7.3%			24.4%
Markham Wood	1.0%	4.5%			6.7%	
Markville	5.9%	5.1%		14.5%		
McLaughlin	3.7%	17.6%			13.4%	18.5%
Meadowvale	2.0%	2.3%	5.8%	5.1%	5.2%	5.8%
Meadowvale Village	1.3%	2.2%	1.9%	4.4%	3.8%	4.8%
Middlefield	0.6%		1.7%	1.6%		131.3%
Mill Pond	18.6%	6.5%		18.1%		127.7%
Milliken	1.6%	17.2%	5.9%	4.7%	12.6%	14.4%
Milliken Mills East	0.6%	20.2%	7.2%	1.0%		8.9%
Milliken Mills West	2.0%		8.3%	5.8%		8.9%
Mimico	10.3%	2.4%	9.7%	4.4%	6.7%	8.5%
Mississauga	3.8%	22.8%				2.7%
Mississauga Valleys	2.0%	0.6%	5.9%	4.1%	6.7%	8.9%
Moffat		4.5%				
Morningside		0.6%	5.9%	13.6%		8.9%
Mosa Park	49.9%	4.5%	5.9%	4.1%		8.9%
Mount Dennis	9.4%	7.3%			56.2%	8.9%
Mount Olive-Silverstone-Jamestown	6.0%		5.9%	9.5%	6.7%	5.8%
Mount Pleasant East	3.7%	5.9%				
Mount Pleasant West	1.9%	4.5%				8.9%
Mountainside						8.9%
MT Albert		10.2%				76.1%
Nelson						8.9%
New Toronto	10.3%		45.5%		6.7%	
Newcastle	8.7%	3.7%			50.7%	8.2%
Newmarket Industrial Park						8.9%
Newtonbrook East	4.9%	4.5%	26.9%	7.3%		8.9%
Newtonbrook West	5.0%		31.5%	3.9%	6.3%	5.2%
Niagara	2.8%	4.5%	5.9%	4.1%	6.7%	8.9%
Nobleton	2.8%	4.5%				
North Richvale	1.6%	14.9%	12.1%	11.2%	22.2%	7.3%
North Riverdale	7.7%	3.3%		4.1%	6.7%	
North St. James Town			5.9%	4.1%		8.9%
Northeast Ajax	1.3%	5.4%	3.2%	2.0%	2.1%	5.0%
Northgate	0.7%		11.5%	4.6%	38.6%	1.2%
Northglan	2.4%					10.0%
Northwest Ajax	1.8%	4.1%	0.9%		9.0%	3.6%
Northwest Brampton	2.8%	4.5%		4.1%		8.9%
Northwest Sandalwood Parkway	1.6%		2.3%	11.5%		11.8%
Northwood Park	3.2%		17.6%			8.4%
O'Connor-Parkview	4.7%	4.5%		4.1%		8.9%
O'Neill	1.7%	3.0%	8.8%		8.5%	17.6%
Oak Ridges	0.8%	1.6%	1.8%	1.9%		12.1%
Oak Ridges Lake Wilcox	1.1%	7.5%	12.2%	2.9%	5.4%	10.2%
Oakridge	2.0%	51.4%				8.9%
Oakwood-Vaughan	5.4%	16.6%	37.0%		4.5%	12.7%
Observatory	17.4%			4.1%		
Old Markham Village			5.9%		6.7%	
Old Milton		4.5%				8.9%
Old Oakville	13.2%	12.6%	65.5%			8.9%
Orochard	6.8%					46.1%
Palermo West	4.4%	4.0%	31.9%		9.3%	27.1%
Palgrave		36.6%				
Palmer		25.6%			6.7%	8.9%
Palmerston-Little Italy		24.7%			6.7%	
Parkwoods-Donalda	4.3%	8.2%	8.9%		6.7%	
Patterson	1.7%	4.7%	9.5%	2.1%	4.8%	3.1%
Pefferlaw		4.5%				52.3%
Plncroest	1.6%		4.7%	8.8%		12.0%
Playter Estates-Danforth	8.5%					40.1%
Pleasant View		1.8%	1.5%	4.1%		8.9%
Port Credit	9.8%					8.9%
Port Perry	4.9%	18.0%	1.0%			94.2%
Port Whitby	4.0%	4.2%	24.6%	51.4%		
Princess-Rosethorn	6.2%	4.9%	5.9%		2.1%	18.7%
Pringle Creek	2.3%	4.8%	15.3%		1.3%	1.5%
Queen Street Corridor	0.8%	4.5%	5.9%	4.1%		8.9%
Raglan	2.8%					
Rathwood	6.4%	4.5%	5.9%	4.1%	6.7%	0.2%
Raymerville	2.6%		1.1%			
Regent Park	2.8%		5.9%		6.7%	8.9%
Rexdale-Kipling	0.7%	17.0%	5.9%	4.1%		8.9%
River Oaks	2.8%	2.4%	18.4%		6.7%	2.5%
Rockcliffe-Smythe	1.2%	4.4%	2.7%	8.2%	17.4%	6.0%
Rolling Acres	1.4%	18.6%	6.8%	4.1%	7.8%	7.6%
Roncesvalles	8.7%	46.4%			9.4%	5.9%
Rose	2.8%					
Rosebank		4.5%				
Rosedale-Moore Park	16.2%		5.9%	4.1%		8.9%
Roseland	3.7%	3.9%			1.4%	8.9%
Rouge E10	5.3%	4.5%	1.9%	8.7%		23.6%
Rouge E11			5.9%			16.5%
Rouge Park		149.3%				
Rouge River Estates	4.4%		5.7%			
Rouge Woods	0.7%		2.1%	27.1%	6.2%	8.7%
Rougemount	64.7%		7.3%		6.7%	8.9%
Royal Orchard		10.8%		4.1%		8.9%
Runnymede-Bloor West Village	13.3%	2.2%		4.1%	27.4%	9.6%
Rural Brook	1.6%		5.9%			117.8%
Rural Burlington	2.8%	4.5%				
Rural Caledon	1.2%	17.6%		110.4%	14.7%	6.6%
Rural Clarington	0.2%	3.7%			128.4%	53.1%
Rural East Gwillimbury					6.7%	
Rural Halton Hills						8.9%
Rural King	39.1%	78.6%			6.7%	8.9%
Rural Oakville		4.5%				
Rural Pickering	62.7%				11.3%	
Rural Richmond Hill						8.9%
Rural Scugog			8.0%		22.3%	15.0%
Rural Uxbridge	7.4%	4.5%	80.2%		14.9%	899.7%
Rural Vaughan		128.8%			27.9%	18.9%
Rural Whitby	13.2%					
Rural Whitchurch-Stouffville	7.8%	9.7%	54.6%	129.5%		63.6%
Sarnia	1.3%	9.3%	10.6%	9.1%	3.1%	13.3%
Sandringham-Wellington	0.8%	1.0%	2.8%	0.9%	2.4%	1.8%
Sandringham-Wellington North						8.9%
Scarborough Village	8.2%			4.1%		
Schomberg						8.9%
Scott	1.1%	3.3%	5.9%		4.9%	24.9%
Sharon	37.6%					7.3%

Exhibit F

Prediction Errors: Estimating January 2012 Sale Prices using the Full MLS Database versus MLS Database Restricted to Individual Brokerage Firms

Community	Brokerage E	Brokerage D	Brokerage B	Brokerage C	Brokerage A	Others	
Sheridan	3.9%	12.3%		5.9%		27.3%	6.4%
Sherwood-Amberglen	11.1%		61.9%				
Shoreacres		4.6%					
Snelgrove	4.1%	2.3%	14.8%				24.9%
Sonoma Heights	2.8%	2.0%			10.0%		
South East	1.5%	15.4%	8.6%	65.2%	4.2%		1.6%
South Parkdale		4.6%		4.1%			
South Richvale	7.2%	20.2%		12.0%			
South Riverdale	1.9%	4.0%	18.1%	26.9%	4.8%		13.4%
South West	3.3%	11.9%	1.3%	4.1%	1.6%		
Southgate	3.9%	4.5%	5.9%	11.5%			8.1%
St. Andrew-Windfields		4.5%	5.9%	5.4%			8.9%
Steeles	1.8%	27.6%	7.7%	7.1%	6.7%		8.9%
Stonegate-Queensway	0.5%	5.1%	20.8%	12.2%			8.9%
Stonehaven-Wyndham	14.5%	2.3%		8.4%	16.1%		13.8%
Stouffville	0.9%	9.6%	4.3%	8.2%	4.8%		2.1%
Streetsville	3.6%	20.9%	12.1%		6.7%		79.7%
Summerhill Estates	8.6%	1.4%	2.8%	0.8%	0.0%		1.9%
Sunderland		4.5%					8.9%
Sutton & Jacksons Point	986.6%	44.6%		4.1%			21.2%
Tam OShanter-Sullivan			5.9%	11.4%			8.9%
Tansley	2.8%	4.5%		4.1%			
Taunton	1.5%		16.1%		12.9%		
Taunton North	6.1%	1.6%	6.4%				5.2%
The Beaches	9.9%	14.8%	169.2%		6.7%		8.9%
Thistleton-Beaumonde Heights			28.3%				
Thorncliffe Park	2.8%		5.9%				
Thornhill	25.1%	262.8%		4.1%	6.7%		
Thornlea		35.1%		17.7%			
Timberlea	2.8%	4.5%					8.9%
Toronto Gore Rural Estate					6.7%		
Town Centre	13.9%						8.9%
Trafalgar	2.8%						
Trinity-Bellwoods	18.3%		5.9%	4.1%			8.9%
Unionville	1.6%		7.2%	4.1%			18.2%
University	27.7%				6.7%		8.9%
Uplands	21.2%	69.8%			37.8%		46.3%
Uptown	3.0%						
Uptown Core	0.2%	11.6%	5.9%				8.9%
Uxbridge	1.5%	20.9%			2.1%		16.6%
Valas of Castlemore	0.7%	18.9%		2.6%			11.9%
Valas of Castlemore North		5.0%	2.3%	1.1%			
Vanier	0.8%	8.4%	25.9%		8.4%		10.8%
Vaughan Grove							8.9%
Vellore Village	1.8%	0.9%	3.3%	0.9%	3.3%		1.0%
Victoria Manor-Jennings Gate							8.9%
Victoria Square	15.0%						8.9%
Victoria Village	0.8%	10.6%					8.9%
Village East	2.4%		5.9%		17.8%		20.5%
Village Green-South Unionville	5.2%		0.7%	2.6%			8.9%
Vinegar Hill					6.7%		
Virginia							8.9%
Waterfront Communities C1	2.8%	4.5%	5.9%	4.1%	6.7%		8.9%
Waterfront Communities C8	2.8%	4.5%	5.9%				8.9%
West Hill	4.3%		5.9%	4.1%	6.7%		8.9%
West Humber-Clairville	4.8%	8.5%	6.9%	1.8%	3.0%		10.0%
West Oak Trails	1.6%	1.8%	5.9%				8.8%
West Shore	2.8%		5.9%				78.0%
West Woodbridge	0.4%	9.0%		4.1%	26.5%		4.8%
Westbrook	3.5%	5.9%	4.2%	0.4%			
Westgate	3.9%	2.3%	3.9%				79.1%
Westminster-Branson	8.4%	4.5%	7.2%	4.1%			8.9%
Weston	3.8%	4.5%		17.5%	6.7%		25.3%
Weston-Pellam Park	1.1%	1.0%	18.3%	4.7%	1.9%		3.6%
Wexford-Maryvale	0.8%	26.7%	4.1%	8.7%			9.8%
Williamsburg	2.1%	8.3%	3.5%	8.2%	1.4%		3.8%
Willmont	24.5%		5.9%		6.7%		8.9%
Willowdale East	1.8%	3.4%	6.0%	7.3%	34.5%		15.8%
Willowdale West	1.4%		48.9%	4.1%	6.7%		28.1%
Willowridge-Marlingrove-Richview	3.3%	9.1%	26.7%				
Windfields	14.6%						
Wismar	1.1%	1.2%	4.8%	2.8%			15.0%
Woburn	1.6%	5.2%	2.5%	3.0%			5.9%
Woodbine Corridor	1.6%	3.0%		95.1%			8.9%
Woodbine-Lumsden	3.4%						21.4%
Woodland Hill		4.0%	12.4%	4.0%	10.3%		10.8%
Woodlands			5.9%				29.4%
Wynwood			21.6%				12.1%
Yonge-Eglinton	9.1%				13.4%		6.9%
Yonge-St. Clair	2.8%	4.5%	5.9%		6.7%		8.9%
York University Heights	0.8%	4.5%	8.8%	4.1%	6.7%		8.9%
Yorkdale-Glen Park		47.4%		4.1%	6.7%		8.9%
All Communities	2.8%	4.6%	5.9%	4.1%	6.7%	8.9%	Total
Total Value of Sales In Jan 2012	\$655,544,887	\$380,808,329	\$242,835,370	\$208,109,807	\$147,022,080	\$590,422,474	\$2,224,833,007
Total Mistakes*	\$18,333,021	\$17,060,887	\$14,424,841	\$9,530,885	\$9,912,409	\$52,337,416	\$120,699,460

Source: Analysis based on MLS data.

Notes

Sale prices in the bottom and top 0.5% of the price distribution (by year) excluded. Records for which community or sale price are missing excluded.

The hedonic model includes a time trend, time trend squared, and a series of dummy variables for the number of bathrooms, number of bedrooms, number of kitchens, house style, type exterior siding, type of garage, drive way type, presence of a fireplace, basement type, heat source and the type of sewers. The model was estimated using data from 2007-2011.

The percentages reported in the table are calculated as follows: (1) for each January 2012 listing where the listing broker is the broker at the top of the column, we calculated the absolute difference between the estimated sale price using only transactions with that listing broker and the estimated sale price using all MLS data; (2) we divided these differences by the actual transaction price; (3) we calculated the median of these percentages, by community.

A price could not be predicted for all sold listings in Jan 2012. When a prediction cannot not be made, we assume that the percentage is the median percentage in the community (across listings where the broker is the broker listed at the top of the column). When the median percentage in the community cannot be calculated, we assume that the percentage is the median percentage across all transactions for which a percentage could be calculated (across listings where the broker is the broker listed at the top of the column).

Calculations for "other" brokers based on regressions that use Brokerage A sample of listings.

Blanks indicate cases where a realtor did not have sales in a community in January 2012.

* Calculated by multiplying the "All Communities" median percentage (reported 2 lines above) by the total value of houses sold in January 2012, separately for the broker reported at the top of the column.

Appendix 1

Appendix 1: Sources and Materials Relied Upon**A. Productions**

CREA00001250

CREA00033030

CREA00038366

MBEF0018_00001941

TREB00003932

TREB00008190

TREB00008190

TREB00018082

TREB00030098

TREB00032519

TREB00047221

TREB00049464

TREB00057729

TREB00062959

B. Submissions

Expert Report of Jeffrey Church, July 27, 2012.

Examination for Discovery of Donald Richardson, March 19, 2012.

Expert Report of Fredrick Flyer, August 13, 2012.

Reply Witness Statement of Mark Enchin (Realty Executives Plus), August 17, 2012.

Response of the Toronto Real Estate Board to the Amended Notice of Application, August 19, 2011.

Statement of Mark Enchin (Realty Executives Plus), June 19, 2012.

Expert Report of Gregory S. Vistnes, June 22, 2010.

Witness Statement of Donald Richardson (TREB), July 27, 2012.

Witness Statement of Evan Sage (Sage Real Estate), July 27, 2012.

Witness Statement of Gary Simonsen (CREA), August 3, 2012.

Witness Statement of Pamela Prescott (Century 21 Heritage Group, Ltd.), July 27, 2012.

Witness Statement of Scott Nagel (Redfin), June 20, 2012.

Witness Statement of Shayan Hamidi (TheRedPin), June 22, 2012.

Witness Statement of Timoleon Syrianos (Ultimate Realty, Inc.), July 26, 2012.

Witness Statement of Tung-Chee Chan (Tradeworld Realty, Inc.), July 27, 2012.

Witness Statement of William McMullin (ViewPoint), June 18, 2012.

C. Websites

http://media.corporate-ir.net/media_files/irol/19/198264/Teranet%202007%20AIF.pdf

<http://www.justice.gov/atr/public/speeches/200484.htm>

<http://www.laws.justice.gc.ca/eng/acts/C-34/index.html>

http://www.propertyline.ca/pages_english/pdf/propertyline_TermsConditions.pdf

<http://www.realtor.ca>

<http://www.realtor.ca/StaticPage.aspx?f=Selling>

<http://www.realtor.com>

<http://www.theglobeandmail.com/report-on-business/economy/housing/real-estate-appraisers-decry-zoocasa-calculator/article559190/>

<http://www.thestar.com/opinion/editorials/article/972228--give-people-tools-to-do-their-homework>

http://www.torontorealestateboard.com/market_news/release_market_updates/news2012/nr_HPI_announcement_0212.htm

http://www.torontorealestateboard.com/market_news/market_watch/historic_stats/pdf/TR_EB_historic_statistics.pdf

<http://www.zillow.com/howto/DataCoverageZestimateAccuracy.htm>

<http://www.zillow.com/wikipages/What-is-a-Zestimate/>

<http://www.zoocasa.com/en/zoopraisal>

<http://www.zoocasa.com/en/zoopraisal#report>

D. Public Articles and Documents

“Annual General Meeting Script, The Toronto Real Estate Board General Meeting Script, Version 11,” May 6, 2009.

“Antitrust in the Not-For-Profit Sector,” National Bureau of Economic Research working paper 12132, March 2006.

“For the Buyer,” Bill Johnston, August 26, 2010.

“How Good Are Zillow’s Estimates,” Wall Street Journal, February 14, 2007.

“Profile of Home Buyers and Sellers,” NAR, 2009.

“Profile of Home Buyers and Sellers,” NAR, 2011.

“REALTORS Need to Know Quite a Lot,” Tom LeBour, President of TREB, Toronto Star, May 28, 2010.

“Search for a Home Can Be Challenging,” TREB President’s Column as it Appears in the Toronto Star, Bill Johnston, President of the Toronto Real Estate Board, April 8, 2011.

“There’s No Investment Like a Home,” TREB President’s Column as it Appears in the Toronto Star, Bill Johnston, President of the Toronto Real Estate Board, July 16, 2010.

Baker, J., “Market Definition: An Analytical Overview,” *Antitrust Law Journal*, 2007.

Ball Memorial Hospital, Inc. v. Mutual Hospital Insurance, Inc., 784 F.2d 1325, 1338 (7th Cir. 1986).

Capps, et. al, "Antitrust Treatment of Nonprofits: Should Hospitals Receive Special Care," working paper, August 2010.

Catherine Tucker, Juanjuan Zhangy, and Ting Zhu, "Days on Market and Home Sales," Working Paper, March 21, 2012.

David Dranove and Richard Ludwick, "Competition and Pricing by Nonprofit Hospitals: A Reassessment of Lynk's Analysis," *Journal of Health Economics* 18, no. 1 (1999).

Emmett B. Keeler, Glenn Melnick, and Jack Zwanziger, "The Changing Effects of Competition on Non-Profit and For-Profit Hospital Pricing Behavior," *Journal of Health Economics* 18, no. 1 (1999).

GeoWarehouse Real Estate Board Agreement between Teranet Enterprises Inc. and TREB, dated February 1, 2009.

Jeffrey R. Church and Roger Ware, Industrial Organization: A Strategic Approach, New York: McGraw-Hill (2000), available at <http://works.bepress.com>.

Thurman Arnold, Former Assistant Attorney General of Antitrust, United States, as quoted by Congressman Jack Brooks, Address at Symposium in Commemoration of the 60th Anniversary of the Establishment of the Antitrust Division (Jan. 10, 1994).