CT-2011-003

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

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

BETWEEN:



THE COMMISSIONER OF COMPETITION

Applicant

- AND -

THE TORONTO REAL ESTATE BOARD

Respondent

- AND -

THE CANADIAN REAL ESTATE ASSOCIATION AND REALTYSELLERS REAL ESTATE INC.

Intervenors

EXPERT REPORT OF FREDRICK FLYER August 13, 2012

I. OVERVIEW

A. Qualifications

1. I am an economist and Senior Vice President at Compass Lexecon. Prior to joining Compass Lexecon in 1999, I was on the economics faculty at New York University's Stern School of Business, and served as a visiting professor in economics at Northwestern University and a lecturer at the University of Chicago. I earned a Ph.D. in economics from the University of Chicago and an M.S. in labor and industrial relations from the University of Illinois. I am the recipient of numerous fellowships, grants, and honors, and have published papers on

microeconomic theory, applied econometrics, industrial organization, and antitrust analysis in leading scholarly journals. I also have presented my work at universities and research organizations around the world and acted as a referee for numerous academic journals.

2. In addition, I have been retained to offer economic analysis of the competitive and antitrust implications of various business arrangements by corporations including Pfizer, Philip Morris, Microsoft, Verizon, EBay, PepsiCo, Reuters PLC, Whirlpool, Monsanto, Walgreens, and the Tribune Corporation. Further, I have been retained as a competition expert by the U.S. Federal Trade Commission on several occasions to assess and testify on the competitive implications of specific transactions. I also have provided economic analyses to the U.S. Department of Justice ("DOJ") as well as regulatory agencies in other countries. Additionally, I was retained by the National Association of REALTORS® ("NAR") as an economic expert in their litigation with the DOJ and studied the role of Virtual Office Websites ("VOWs") in the US market extensively for that matter. A copy of my curriculum vitae, which details my professional experience, including a list of all publications I have authored within the last ten years and all of the cases in which I have testified within the last four years, is included as Appendix 1.

B. Outline of Task

3. I have been asked by counsel for The Canadian Real Estate Association ("CREA") to: (a) evaluate the economic incentives and the potential impact on CREA, CREA's members and CREA's trademarks of the remedy requested by the Commissioner of Competition to be imposed on the Toronto Real Estate Board ("TREB") (the remedy being, in effect, requiring TREB's VOW data feed to include a complete inventory of property information available on TREB's MLS® System, including historical sales data and all properties currently listed for

sale), and (b) to evaluate and/or respond to the economic evidence and arguments put forth in the Expert Report of Gregory S. Vistnes, Ph.D. dated June 22, 2012 ("Vistnes Expert Report") to the extent that it relates to the analysis identified in (a).

4. In undertaking my work, I and my staff under my direct supervision have reviewed various materials associated with this matter, including business documents, market analyses by third-party providers, and the materials provided by the parties and CREA in this matter (including the Vistnes Expert Report and witness statements by business representatives of companies providing real estate services in the Toronto area). I have also had conversations with CREA business representatives. A complete list of the materials I relied on for this report is attached as Appendix 2.

C. Summary of Main Conclusions

5. Assessing the economic effects on CREA of the remedy the Commissioner requests be imposed on TREB¹ involves understanding how the remedy likely will change or affect competition in brokerage services and, in turn, how those changes will ultimately impact consumers. Specifically, policies that benefit consumers by making a board's MLS® System and the associated brokerage services more efficient also benefits CREA, as consumers' perception of the value of an MLS® System and the quality of services provided by REALTORS® using that MLS® System would be enhanced (thus protecting and enhancing the value of CREA's REALTORS® and MLS® trademarks). Therefore, an important aspect in assessing the impact on CREA of the remedy requested by the Commissioner is to assess how the remedy might affect competition and consumers. Evaluating the competitive impact of the

For the remainder of the report, when I refer to the effects of the requested remedy on CREA, I am including the effects on both CREA's members and CREA's trademarks.

requested remedy involves balancing the potential consumer benefits against potential consumer harm. Therefore, based on my review of the economic evidence to date, I conclude that:

- 1. The economic evidence and arguments put forth in the Vistnes Expert Report do not provide a reliable basis from which to evaluate the likely competitive effects associated with the remedy requested by the Commissioner for any area which is relevant to CREA.
 - a. Dr. Vistnes' conclusion that "dynamic" competition and innovation in brokerage services would be harmed if the disputed fields² are not a mandatory part of TREB's VOW feed is based on flawed economic reasoning.
 - b. In evaluating the competitive significance of VOWs, Dr. Vistnes uniquely attributes services to brokers who use VOWs that are available through brokers who do not use VOWs. Therefore, he potentially overstates the competitive significance that VOWs have (and would have in the future) in the market for broker services.
 - c. In evaluating the competitive benefits of the Commissioner's proposed policy, Dr. Vistnes confuses the competitive significance of brokers who use VOWs generally with the incremental effect that the requested remedy would have on the competitive significance of brokers offering VOWs.
- 2. Dr. Vistnes' analysis does not even consider the possibility that the Commissioner's requested remedy could harm competition (i.e., lower consumer welfare) by diminishing the credibility consumers may assign to CREA's trademarks, and thus in turn reduce the economic incentives that brokers have to participate in an MLS® System and to offer services as REALTORS®.
 - a. To assess the competitive implications of a remedy for the entire market of brokerage services, one must understand how the implementation of the remedy would affect the various market participants' economic incentives and resulting actions. Simply looking at only one aspect of market competition, such as how brokers who use VOWs may benefit from the disputed fields being made available, provides an incomplete picture of overall competitive effects.
 - b. To determine overall competitive effects, one must balance the procompetitive benefits that a remedy may provide against the

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The disputed fields in this matter include information on sale prices, pending sales, inactive listings, and buyside broker commissions.

anticompetitive effects across the entire market. The balancing of potential anticompetitive harm against predicted procompetitive effects is an analysis that is not developed by Dr. Vistnes, as he does not carefully estimate either the incremental benefits or harm that consumers would face if the disputed fields were added to a VOW feed.

- 3. Finally, the likely competitive effects that would result from the remedy requested by the Commissioner will depend on the specific characteristics of the relevant market. These characteristics include the availability of substitutes to VOWs, consumers' usage and preferences for these alternatives, the current prevalence of brokers who use VOWs, the level of broker competition, and the financial and technological resources available to the boards and associations who operate the MLS® Systems. Due to the fact that these underlying characteristics vary across board jurisdictions and their associated MLS® Systems, the competitive implications associated with the implementation of the requested remedy may also vary across these areas. In other words, it cannot be assumed that a remedy that may be found to be beneficial to consumers in relation to TREB is also appropriate for other boards and associations across Canada. Specifically, the likely competitive effects of any proposed remedy would first have to be assessed against the specific characteristics of the relevant market for those boards and associations before any conclusions could be drawn.
- 6. In the remainder of this report, I expand on the basis for the above conclusions. My work is ongoing, and therefore I may update my conclusions as new evidence becomes available.

II. DR. VISTNES DOES NOT PROVIDE A RELIABILE BASIS FROM WHICH TO EVALUATE THE LIKELY COMPETITIVE EFFECTS ASSOCIATED WITH THE COMMISSIONER'S REQUESTED REMEDY

7. Dr. Vistnes' analysis does not provide a reliable basis from which to draw sound conclusions on the competitive effects associated with the Commissioner's requested remedy. Dr. Vistnes' conclusion that "dynamic" competition and innovation in brokerage services would be harmed if the disputed fields are not a mandatory part of TREB's VOW data feed is based on flawed economic reasoning. In his evaluation, Dr. Vistnes confuses the general competitive significance of brokers who use VOWs with the incremental effect that the Commissioner's requested remedy would have on these brokers' competitive offerings, and more generally on the

services available to consumers. If the remedy only modestly improves the services of brokers who use VOWs, or improves services for which many close substitutes exist elsewhere, then the competitive benefits of the remedy would be limited regardless of how these brokers enhance competition generally. In other words, to show that there are competitive benefits from adopting the remedy, one must show that brokers who use VOWs would measurably enhance the services they offer and that close substitutes for these enhanced services would not be available elsewhere.³ Dr. Vistnes' does not show that making the disputed fields available on the Internet would significantly improve the quality of services that brokers who use VOWs offer, nor does he show that these improved services would not be available elsewhere. In fact, Dr. Vistnes' fails to acknowledge that many of the services he attributes to brokers who use VOWs are also available through other brokers who do not use VOWs. In sum, Dr. Vistnes potentially overstates both the overall competitive significance of brokers who use VOWs, as well as the impact that limiting the information on these brokers' websites would have on the market for brokerage services.

8. Further, Dr. Vistnes' analysis does not assess the potential competitive harm that could result from the Commissioner's requested remedy. The overall competitive effect of a proposed remedy depends on the balance of anticompetitive harm against procompetitive effects. Therefore, a reliable analysis requires that both the procompetitive benefit and anticompetitive harm potentially resulting from the requested remedy be carefully measured. As I explain below, Dr. Vistnes' analysis does not carefully measure either of these effects and, therefore, cannot be used as a basis to draw sound conclusions about the competitive effects in the market that would

³ Enhanced services could include lower pricing.

result from the requested remedy or the potential effects on CREA if the requested remedy is ordered by the Tribunal.

A. CREA's Economic Interest in the Requested Remedy

- 9. CREA is a national industry association with a membership of over 105,000 real estate agents and brokers working through approximately 100 local boards and associations across the country, who are also members of CREA. CREA's members must abide by certain codes and policies, including those that require a high standard of professional service, the strict adherence to a code of ethics and the protection of CREA's trademarks.
- trademarks identify professional services provided by CREA members to effect the purchase and sale of real estate as part of an MLS® System, which is a cooperative selling system operated by a local board in association with the MLS® trademarks (under license from CREA). CREA also is a co-owner (with NAR) of the REALTORS® trademarks. These trademarks certify to the public that brokerage services are being provided by members of CREA who subscribe to a high standard of professionalism and ethics. Together, the MLS® and REALTORS® trademarks are an assurance of integrity and identify a standard of brokerage services and professionalism. In particular, an MLS® System ensures a certain level of accuracy of information, professionalism and cooperation among REALTORS® to effect the purchase and sale of real estate. Only CREA members in good standing who abide by all of CREA's by-laws, rules and policies are able to call themselves REALTORS® and to use the MLS® trademark in association with the operation of their brokerage business.⁴

Witness Statement of Gary Simonsen, dated August 3, 2012 ("Simonsen Witness Statement) at 8 to 16.

- 11. As an industry association, CREA, amongst other things, represents it members on national issues affecting the real estate industry; aims to assist its members in better serving consumers including through the development of technology resources; formulates national standards, including those designed to enhance the reputations and professionalism of those bearing the REALTORS® designation, and takes the necessary steps to protect and enhance the value of its trademarks.⁵
- 12. CREA has an economic interest in policies that affect both member brokers' incentives to participate in an MLS® System and to provide the high standards of service associated with it, and consumers' incentives to participate in an MLS® System and to use the services of a REALTOR® who provides brokerage services using an MLS® System. Any policy that decreases those incentives has the potential to harm CREA's trademarks. Therefore, an important aspect of the requested remedy from CREA's perspective is how it would affect competition in the market for brokerage services and in turn consumer welfare.

B. Dr. Vistnes Does Not Accurately Evaluate the Potential Benefits Associated with the Requested Remedy

13. There are two central flaws with Dr. Vistnes' assessment of the potential competitive benefits from the Commissioner's requested remedy. The first flaw is that Dr. Vistnes confounds the attributes of brokers who currently use VOWs with their competitive contribution to the market. For example, Dr. Vistnes suggests that brokers who use VOWs drive the existence of discounted commissions in the market. However, he fails to acknowledge that discounted commissions are widely available through brokers who do not use VOWs and therefore potentially exaggerates the impact of brokers that use VOWs on any lowering of

⁵ CREA official website, "Organization", http://www.crea.ca/organization (accessed August 1, 2012); Simonsen Witness Statement at 6, 7 and 17.

commissions in the market. In other words, he mischaracterizes services that are widely available through other types of brokers as somehow being unique to brokers who use VOWs.

- 14. The second flaw in Dr. Vistnes' analysis is that even if brokers who use VOWs do bring unique services to the market, he fails to identify how the requested remedy would change those services. In other words, any competitive benefits from the Commissioner's requested remedy would only flow from the incremental impact of that remedy on brokers who use VOWs which is not necessarily equal to the competitive benefits caused by these brokers generally.
- 15. In sum, Dr. Vistnes' analysis ignores specific characteristics of the market for brokerage services that affect the ultimate impact of the Commissioner's requested remedy. Namely, the two key questions that his analysis fails to address are: (1) Are there many brokers who do not use VOWs that provide similar services to those he attributes to brokers who do use VOWs?; and (2) If brokers who use VOWs do indeed bring unique services that are valuable to consumers, will the Commissioner's requested remedy dramatically improve the efficiency of these brokers in providing these unique services?

1. Dr. Vistnes Analysis Ignores that Many Other Brokers Offer Similar Services to Those He Attributes to Brokers Who Use VOWs

16. Dr. Vistnes claims that brokers who use VOWs drive dynamic competition because they provide consumers with more efficient and lower cost services than traditional brokers.⁶

For these VOW services to be driving dynamic competition, as Dr. Vistnes claims, it must be the case that these types of services are not available at similar costs through other brokers.

Otherwise, if these services are widely available at similar pricing, then brokers who use VOWs would bring nothing special to the market. Therefore, to assess whether brokers who use VOWs

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⁶ Vistnes Expert Report at 185, 189 and 192.

attributes as being unique to brokers who use VOWs are widely available through brokers who do not use VOWs. As I explain below, the services that Dr. Vistnes attributes to the innovative offerings from brokers who use VOWs are available currently through other brokers.

an MLS® System is not a unique service offered by brokers who use VOWs. For example, many municipalities and chambers of commerce offer neighborhood guides, such as the "Toronto Neighborhood Guide". The Toronto city website and even Wikipedia are also online sources of this same information. Many localities also have neighborhood community sites, and of course many brokers operate websites that provide detailed information about neighborhoods. For example, Realosophy Realty, Inc. offers free access to an online tool called Neighborhood Match that matches users to neighborhoods that are a good fit for them based on different criteria, such as house values and school quality. Further, REALTOR.ca, the public website operated by CREA, will begin to incorporate neighborhood demographic information starting in 2013.

18. A consumer's ability to directly search non-confidential information from an MLS® System is not unique to brokers who use VOWs. Many Internet real estate websites with this functionality exist, including REALTOR.ca. Additionally, many REALTORS® participate in CREA's various permissions management programs and recently implemented Data

http://www.torontoneighbourhoods.net/; http://www.toronto.ca/demographics/neighbourhoods.htm; http://en.wikipedia.org/wiki/List_of_neighbourhoods_in_Toronto (accessed August 2, 2012)

Witness Statement of John Pasalis, Realosophy Realty Inc. (June 20, 2012) at 10. See also, for example, http://www.blogto.com/neighbourhoods/; http://www.ramforhomes.com/toronto_neighbourhoods (accessed August 2, 2012).

Simonsen Witness Statement at 31.

Distribution Facility ("DDF"), which result in the sharing of listings among competitors and, therefore, the ability of consumers to access multiple brokers' listings from one website. ¹⁰ A 2011 survey showed that approximately 73 percent of responding CREA members intended to use CREA's DDF. 11 CREA's DDF includes a module that allows brokers to distribute listings data from MLS® Systems to third parties who operate public websites, such as Zoocasa.¹² Further, several boards across the country provide or facilitate data sharing services for their membership. In Vancouver, ninety percent of brokers have opted into that board's data listing service (which includes both Internet Date Exchange ("IDX") and VOW services). Saskatchewan has a province-wide MLS® System that is available to all members and has a facility for distributing data to third party websites that is comparable to CREA's DDF. Approximately 99 percent of the members of the London St Thomas Association of REALTORS® participate in its IDX solution, which involves the association operating a website that members can then frame onto their personal websites. In Quebec there also is one MLS® System for the entire province which is run through a third-party provider. Consumers can access all active MLS® listings through a website run by the third-party provider and that provider also sends listing content to third party websites selected by brokers. 13

19. Providing information related to home values in particular neighborhoods, such as comparative market analyses, is not unique to brokers who use VOWs. Zoopraisel offers an online appraisal tool for Canadians¹⁴ and many brokers who do not use VOWs offer the same.¹⁵

¹⁰ CREA00029813/1; TREB-S000003/1

Simonsen Witness Statement at 82.

¹² Simonsen Witness Statement at 58.

¹³ Simonsen Witness Statement at 71-81.

http://www.zoocasa.com/en/zoopraisal (accessed August 2, 2012)

- 20. Dr. Vistnes also attributes lower commissions to brokers who use VOWs. However he ignores the fact that many brokers already offer a range of commission rates (so called "discount brokers") and/or the ability to negotiate lower commission rates, including brokers who do not use VOWs. Again, the evidence does not indicate that discounted or lower brokerage fees are unique to brokers who use VOWs.
- 21. Additionally, Dr. Vistnes claims that brokers who use VOWs have measurable cost advantages over other brokers, even though he does not identify any unique services provided by brokers who use VOWs or provide any reliable empirical measure of relative broker efficiencies. Specifically, Dr. Vistnes' cites as support the fact that consumers of brokers who use VOWs attend fewer showings prior to closing on a property. 17 However, he ignores the fact that not all consumers share the same attributes and consumers who use brokers that offer VOWs may be different than consumers who use brokers who do not provide VOW services. 18 That is, a consumer that is better able to acquire information via the Internet would be more willing to use an Internet search in place of an in-person search. In other words, these consumers of brokerage services may be different from the general population of consumers that use brokerage services. Thus, this type of buyer may view fewer properties regardless if they used a broker that used a VOW, an IDX or another type of electronic search service (such as broker delivered emails on home listings). Thus, the statistics on average showings cited by Dr. Vistnes do not provide reliable evidence on the existence of VOW efficiencies. Moreover, Dr. Vistnes also ignores contradictory evidence such as NAR's 2011 study that states that buyers who used the Internet

See, for example, http://torontorealestatelibrary.tv/how-much-is-my-home-worth-2; http://www.primetorontoneighbourhoods.com/how-much-is-my-home-worth/; http://suburbantorontorealestate.com/sellers/how-much-is-my-house-worth/ (accessed August 2, 2012)

¹⁶ CREA00034125/1; NAR, "Profile of Home Buyers and Sellers 2011", 2011 at page 97. (CREA-S000924/99)

Vistnes Expert Report at footnote 216.

NAR's "Profile of Home Buyers and Sellers 2011" Section 3 (CREA-S000924/43)

viewed a median of fifteen properties before making a purchase, with a median search time of twelve weeks, versus a median viewing of six homes with a median search time of six weeks for consumers who did not use the Internet in their home searches.¹⁹

- 22. Finally, economic reasoning suggests that it is unlikely that brokers who use VOWs would have dramatic cost advantages over brokers who do not use VOWs, as access to the information contained in an MLS® System is only one aspect of the many services provided by brokers. Buyers and sellers receive various types of services from brokers, including locating a desired property, helping to price the property, facilitating negotiations of transactions, assisting with paperwork, identifying potential sources of financing, attending real estate showings and advertising the home through different media. For example, surveyed buyers said that the benefits of using a broker included helping to understand the process, noting features or flaws in certain properties, educating the buyer about the search areas, referring service providers, negotiating better prices and terms, shortening the search time, and helping to locate financers.²⁰
- 23. The main point above is that brokers provide and compete on a wide range of services, and access to the information in an MLS® System is just one of the many services that brokers offer to clients. The large range of provided services indicates that the accessibility of the disputed fields in question in this matter on the Internet would represent only one part of the many potential brokerage services provided to consumers, even to consumers who rely on brokers that use VOWs. Therefore, to conclude that brokers who use VOWs will be far more efficient at delivering brokerage services than their competitors who do not use VOWs, as Dr.

NAR's, "Profile of Home Buyers and Sellers 2011", at Exhibit 3-14.

NAR's, "Profile of Home Buyers and Sellers 2011," at 62-63 (CREA-S000924/64-5).

Vistnes suggests,²¹ one must attribute a great amount of importance to the accessibility of these disputed fields on the Internet, or identify alternative characteristics that make brokers who use VOWs more efficient. In short, Dr. Vistnes fails to identify any unique advantage that brokers who offer VOWs have over other brokers currently, or how the provision of the disputed fields to these brokers would provide such advantages.

2. Dr. Vistnes Analysis Does Not Measure the Incremental Effect from the Commissioner's Requested Remedy

- 24. Dr. Vistnes appears to imply that any potential competitive benefits associated with brokers who use VOWs would not emerge without the Commissioner's requested remedy. However, the important economic question isn't just what brokers who use VOWs offer the market generally, but also what the effect of the remedy would be on the efficacy of these broker services. The incremental effect on the efficacy of brokers who use VOWs depends on two factors: (1) the value consumers place on the disputed fields; and (2) the ability of consumers to access these disputed fields through alternative means. Dr. Vistnes' analysis does not reliably address either of these questions. He ignores evidence that suggests these fields are not highly valuable to consumers²² and does not assess the incremental cost to consumers of acquiring this information.
- 25. The key point is that TREB's VOW policy does not prohibit consumers from acquiring the information in the disputed fields, only that the information be sought directly through other means (including from the broker) and not simply from an Internet site. Therefore,

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Vistnes Expert Report at 189-90.

Some evidence suggests that the marginal value of this information to consumers may be low. For example, "[m]ore than 80 percent of home buyers found photos and detailed information about the property very useful when searching for a home. Virtual tours followed with 63 percent of buyers finding them very useful. The least useful features include information about upcoming open houses or about recently sold properties" (NAR "Profile of Home Buyers and Sellers 2009" at p45 [CREA-S001071/46]

even if this information is highly valuable to consumers, the only incremental cost currently imposed on consumers is the differential between acquiring this information through current means versus accessing the information over the Internet. In particular, requiring TREB and potentially other boards who operate MLS® Systems to make the disputed fields of information accessible on the Internet (whether through a VOW or another data sharing vehicle) can lower consumers' costs of acquiring this information. The value to consumers from a change in the accessibility of these disputed fields is the reduced costs associated with acquiring the information, and not the value of the information itself, as the requested remedy would only make available on the Internet fields of information that consumers already have available to them through their broker (perhaps via a phone call or an email). Further, these reduced costs would only be relevant for information that consumers find valuable. Dr. Vistnes' analysis fails to evaluate how provision of the disputed fields on Internet websites significantly reduces the costs associated with acquiring such information, or the overall value of such information to consumers.

C. Dr. Vistnes Ignores the Potential Competitive Harm That May Result From the Commissioner's Requested Remedy

26. As discussed above, the remedy requested by the Commissioner is a policy that potentially can affect both member brokers' incentives to use an MLS® System and consumers' incentives to participate in an MLS® System and use the services of a REALTOR®. Therefore, to assess the overall impact on CREA of the requested remedy, one must assess not just the potential competitive benefits, but also the potential competitive harm to consumers.

Specifically, if the requested remedy results in few incremental benefits to consumers but

How much it lowers consumer costs overall depends on the alternative methods consumers would use to acquire such information and how many consumers would rely on the Internet services versus these alternative sources.

changes broker incentives that result in reduced product offerings (or raised pricing), then the requested remedy would end up harming consumers, REALTORS® and CREA. Thus, the evaluation of the ultimate effect of the requested remedy on CREA requires evaluating both the potential procompetitive benefits and potential anticompetitive harm to consumers.

- 27. Assessing the potential anticompetitive effects involves understanding how the Commissioner's requested remedy may change broker incentives to provide services or directly impose costs on consumers.²⁴ Brokers' incentives to provide services would be reduced if dissemination of the disputed fields on the Internet lowers the expected returns from providing brokerage services to real estate purchasers and/or sellers or lowers the benefits from participating in a board's MLS® System.²⁵ These costs might include direct out of pocket costs to provide a VOW feed, as brokers who do not use VOWs may bear some of this burden. Also, as I discuss below, any reputational harm to CREA trademarks can result in lowered expected returns to brokers that rely on these trademarks to attract clients.
- 28. The dissemination of confidential MLS® information on the Internet could directly lower consumer welfare and in turn lead to reputational harm to brokers. The concern is that providing access to the disputed fields on the Internet could be viewed by consumers as raising privacy concerns or as being an improper disclosure of information sourced from an MLS®

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For example, having the prices paid for a home accessible on the Internet may impose costs on buyers and/or sellers, if such availability represents a loss of privacy or the improper disclosure of confidential information. In order to assess this impact, one must understand whether such privacy is valued by consumers, whether brokers currently protect this information, and what other available alternatives there are for the general public to look up this information.

A basic tenet in economics is that incentives to invest depend on expected returns emanating from those investments. Further, economic theory shows that in many instances consumers can be made better off by incentivizing investments that improve product quality or availability, even though these incentives arise from restrictions that may limit the ability of other firms to compete. For example, see Carlton & Perloff, Modern Industrial Organization, 4th Edition, p. 536.

System, and could lead to a serious loss of trust that consumers have come to place in the standards of service and level of professionalism symbolized by CREA's trademarks, a loss of faith in the credibility of MLS® Systems, REALTOR.ca and the services of REALTORS® and reduced incentives to use such services.²⁶

"Consumers may be upset by the disclosure of their confidential transactional information from an MLS® System and will blame the REALTOR® for what they view as improper disclosure. This could significantly impact the consumer's willingness to use the services of a REALTOR® and participate in an MLS® System. In short, a REALTOR® who makes private information from an MLS® System accessible over the internet will certainly not be associated in the public's mind with a high standard of professionalism and service."

- 29. Currently, the information in the disputed fields can only be accessed from the MLS® through a licensed TREB broker. In this sense, a policy that excludes the disputed fields from a VOW data feed may result in costs to Internet users who want access to the information in the disputed fields through the Internet, as that policy would limit the form of dissemination of this particular information to only those consumers working with a licensed broker. However, this limitation on Internet users generally may provide benefits of maintaining the confidentiality of this information. The requested remedy proposes to make the disputed fields available to any individual with an email address, thus potentially reducing the level of privacy or confidentiality available to consumers and brokers who use an MLS® System.
- 30. Therefore, from a social welfare perspective, any analysis on the effect of the proposed policy should understand how the change affects brokers' incentives to provide services and to participate in and use an MLS® System, in addition to any direct consumer costs from reduced privacy or the disclosure of confidential information. A reduction in broker or

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²⁶ Simonsen Witness Statement at 87-88.

²⁷ Simonsen Witness Statement at 90.

consumer participation in an MLS® System would impose social welfare costs. Specifically, an MLS® System is an accessible source of information for member brokers that facilitates the matching of buyers and sellers. A broker's participation in an MLS® System is voluntary and the efficiencies provided by the MLS® System depend on the number of participating brokers and consumers. All else equal, these benefits will increase the greater the number of participating brokers and consumers.²⁸ Therefore, incentivizing brokers and consumers to participate in and use an MLS® System directly benefits consumers who use the system, as it increases the information available on the MLS® System. Dr. Vistnes does not address the fact that a policy change could alter the incentives of both brokers and consumers to participate in an MLS® System or to use the system as intensively. Increasing the costs to brokers and consumers of participating in an MLS® System, perhaps through reputational harm or the disclosure of confidential information, creates incentives to diminish reliance on the system. Indeed, there are examples of brokers who have opted out of their local MLS® System in the past, ²⁹ and such disruptions (or reduced participation generally) can lead to significant consumer harm and loss of value to CREA's trademarks.

III. THE COMPETITIVE IMPLICATIONS OF ANY PARTICULAR REMEDY WOULD VARY ACROSS BOARDS' MLS® SYSTEMS

31. The consumer value derived from allowing brokers who use VOWs to publish the disputed fields over the Internet, holding all else constant, is the reduced cost to consumers from obtaining this information via the Internet as opposed to other available means. As explained

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Specifically, the greater the number of sell-side brokers and consumers they represent, the greater are the incentives for buy-side brokers and the consumers they represent to use the MLS® system. Economists sometimes refer to this type of structure as a two-sided market.

In 2004, a group of brokerages in Bakersfield, CA broke apart from the MLS® to form their own listing service. See, e.g. Jennifer Plotnick, "REALTORS® Discuss Impact of Competing Listing Service in Bakersfield, Calif.", The Bakersfield Californian, September 3, 2004.

above, this reduction in cost depends on the availability of competitive alternatives as well as consumer preferences, both of which can vary across the jurisdictions of boards that operate MLS® Systems.³⁰ In other words, whether there is in fact a reduction in cost and, if so, the extent of the reduction requires an assessment of the existence of competitive alternatives and the characteristics of consumers in the particular market under review.

A. Consumer Characteristics Vary Across Boards' MLS® Systems

- 32. By way of example, the degree of computer penetration and Internet usage would affect the impact of the requested remedy on consumers. Internet access of individuals varies widely across jurisdictions in Canada where boards operate MLS® Systems. For example, while 77 percent of Canadians in 2009 had Internet access, only 65 percent of people in Newfoundland and Labrador had home access. At the other end of the spectrum, 87 percent of Calgary and Saskatoon residents had home access. To put it another way, the percentage of people in Newfoundland and Labrador who go without home Internet access is over twice the percentage of those who go without home Internet access in Calgary.
- 33. Further, even with ready access to the Internet, consumers may vary in their desire to use the Internet to facilitate a real estate transaction. Age and past experience with REALTORS® can affect this desire. For example, a board whose jurisdiction includes a larger percentage of older residents who have less proficiency with the Internet and who from past experience are accustomed to using the services of REALTORS® in whom they have developed trust, may experience a relatively lower interest in using the Internet to research properties, when

Note that while the following discussion focuses on how competitive factors could and do vary across MLS® areas, many of these factors could also vary across time within a particular MLS® area as well.

Statistics Canada. Table 358-0122 - Canadian Internet use survey, Internet use, by location of access, Canada, provinces and selected census metropolitan areas (CMAs), every 2 years (percent).

compared to boards whose jurisdiction includes a large percentage of first-time younger buyers or sellers.

- B. Availability of Other Internet Data Sharing Services Varies Across MLS® Systems
- 34. The existence and use of services that provide close substitutes for brokers who use VOWs would also influence the competitive effects associated with the Commissioner's requested remedy. The evidence shows that these services are not uniform across boards that operate MLS® Systems. For example, 90% of brokers have opted into Vancouver's IDX and VOW solution, resulting in approximately 30% of those brokers having IDX solutions and approximately 23% having VOW solutions. On the other hand, London St. Thomas has had a long standing and successful IDX solution, and virtually no interest in a VOW solution by consumers or REALTORS®. Other jurisdictions, like Saskatchewan, while providing IDX and VOW solutions, have experienced declining interest. There are also jurisdictions, such as Quebec, that operate an MLS® System for the entire province and facilitate the distribution of MLS® listing data to third party websites. 33
- 35. Closely related to this factor is the fact that a board's technical capabilities and financial resources vary across boards.³⁴ Therefore, the cost of implementing any policy relating to Internet data sharing would vary across board jurisdictions, as would the burden placed on brokers who do not use the Internet to subsidize brokers that do.

³² Simonsen Witness Statement at 78-79.

³³ Simonsen Witness Statement at 73-82.

Simonsen Witness Statement at 70.

C. The Regulatory Environment Varies Across Board MLS® Systems

36. Finally, any local regulatory requirements could affect the overall competitive implications of the Commissioner's requested remedy as each local board is subject to regulation by their province or territory and these regulations are not uniform. Also, the manner in which those regulations may be applied to Internet data sharing may vary. For example, I understand that there is provincial legislation across the country that includes restrictions on advertising in the real estate industry (including when sold information can be disclosed). Whether those restrictions apply to VOWs will depend on whether the regulators view VOWs as advertising.³⁵

D. Competitive Implications Associated with any Internet Data Sharing Policy Will Vary Across MLS® Areas.

37. As the above discussion illustrates, the overall competitive effect of a policy that implements Internet data sharing (including VOWs) will most likely vary across board MLS® Systems because board resources, consumer characteristics and preferences, the availability of alternative Internet vehicles and the regulatory environment vary across board jurisdictions. Consequently, any decision that may be viewed as appropriate because it would improve consumer welfare in Toronto would not necessarily be appropriate for other board jurisdictions as the estimated consumer benefits and consumer harm from this policy change would not necessarily apply to these other areas. In short, any remedy the Tribunal deems appropriate in this proceeding in relation to TREB would not necessarily be in the best interest of consumers in other areas in Canada. Rather, requiring another board to implement the remedy as sought by the Commissioner for TREB, regardless of that board's particular circumstances (including those discussed above), could have unintended negative effects on consumer welfare.

³⁵ Simonsen Witness Statement at 21 and 89.

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Fredrick A. Flyer

APPENDIX 1

FREDRICK A. FLYER May 2012

Senior Vice President Lexecon Inc. 332 South Michigan Avenue Chicago, Illinois 60604-4937 (312) 322-0231 (direct) (312) 322-0218 (fax) fflyer@lexecon.com

AREAS OF SPECIALIZATION

Applied Microeconomics and Econometrics, with a focus on antitrust, industrial organization, labor, valuation analysis and intellectual property. These economic analyses have been conducted for litigation, federal commission filings, corporate and governmental entities, and for publication in scholarly journals.

EDUCATION

Ph.D., University of Chicago, Economics, August 1993.

M.S., University of Illinois at Urbana-Champaign, Labor and Industrial Relations, May 1988.

B.S., University of Wisconsin-Madison, Economics, December 1985.

HONORS AND FELLOWSHIPS

Stern Faculty Research Stipend, Stern School of Business, 1995-1998

Research Fellowship, New York University, 1994-1996, 1998

Research Grant, Russell Sage Foundation, 1994

Research Fellowship, National Opinion Research Center 1990-1993

Center for the Study of the Economy and the State Doctoral Fellowship, University of Chicago, 1989-

91

Bradley Fellowship, Bradley Foundation 1991-92

UU/Phoenix Fellowship, University of Chicago, 1989-92

McNatt Award in Labor Economics, University of Illinois, 1988

PROFESSIONAL EXPERIENCE

Compass Lexecon, Chicago, Illinois (1999 - present): Current Position: Senior Vice President

New York University, New York, New York; (1993 - 1997 and 1998 - 1999): Assistant Professor in Economics at the Stern School of Business, with a research emphasis in industrial organization, labor, and applied microeconomic analysis. Courses Taught – Masters and Ph.D. Level: Microeconomic Theory and Application, Econometric Theory and Application

Northwestern University, Evanston, Illinois (1997 – 1998): Visiting Professor in the Department of Economics, with a research emphasis in industrial organization, labor, and applied microeconomic analysis. Courses Taught - Advanced and Introductory Level: Microeconomic Theory and Application, Labor Economics Theory and Application

University of Chicago, Chicago, Illinois (1990 – 1993): Lecturer in the Department of Economics. Courses Taught - Undergraduate Microeconomic Theory and Application

ARTICLES

<u>The New Economics of Teachers and Education</u>, co-authored with Sherwin Rosen, *National Bureau of Economics Research*, Paper No. W4828, August 1994.

Reprinted in: The National Opinion Research Center, ERC-Paper Series, 94-1.

Summarized by Lindley H. Clark Jr. in: *The Wall Street Journal*, "Speaking of Business: The High Cost of High (and Lower) Schools", Pg. A18, October 4, 1994.

Some Economics of Precollege Teaching, co-authored with Sherwin Rosen, in *Assessing Educational Practices: The Contribution of Economics*, edited by William Baumol and William Becker, MIT Press: 1995.

<u>Technical Standards Coalitions for Network Goods</u>, co-authored with Nicholas Economides, *The Study of Financial Markets and Institutions*, Salomon Center Press: November 1995.

<u>The Economics of Education</u>, co-authored with Sherwin Rosen, *Journal of Labor Economics*, January 1997.

<u>The Influence of Higher Moments of Earning Distributions On Career Decisions</u>, *Journal of Labor Economics*, October 1997.

<u>Agglomeration Economies, Heterogeneity, and Firm Location Choice</u>, co-authored with Myles Shaver, December 1997, Paper IB-97-10, *Stern School of Business*, New York University

<u>Compatibility and Market Structure for Network Goods</u>, co-authored with Nicholas Economides, February 1998, Paper EC-98-02, *Stern School of Business*, New York University.

<u>Equilibrium Coalition Structures in Markets for Network Goods</u>, co-authored with Nicholas Economides, *Annales d'Economie et de Statistique*, July 1998.

<u>Parental Optimizing Behavior and the Measurement of School Quality</u>, joint with Paul Wachtel, Working Paper, August 2000.

Agglomeration Economies, Firm heterogeneity, and Foreign Direct Investment in the United States, co-authored with Myles Shaver, *Strategic Management Journal*, December 2000.

<u>Location Choices Under Agglomeration Externalities and Strategic Interaction</u>, co-authored with Myles Shaver, *Advances in Strategic Management*, Vol. 20, August 2003.

Spillovers from Local Market Human Capital and the Spatial Distribution of Productivity in Malaysia, co-authored with Timothy Conley and Grace Tsiang, *Advances in Economic Analysis and Policy*, Vol. 3, December 2003.

<u>Compatibility and Market Structure for High-Technology Goods</u>, co-authored with Nicholas Economides, currently under second-round review at the *Journal of Industrial Economics*.

An Assessment of Causal Inferences in Smoking Initiation Research and a Framework for Future Research, co-authored with James Heckman and Colleen Loughlin, *Economic Inquiry*, Vol. 46, January 2008.

<u>Agglomeration Economies, Firm heterogeneity, and Foreign Direct Investment,</u> co-authored with Myles Shaver, *Multinational Enterprise Theory*, Vol. 1, edited by Jeffrey A. Krug and John D. Daniels, SAGE Publications: 2008.

Some of the Economics Behind the Proposed Horizontal Merger Guidelines, Antitrust Update, Weil Gotshal, Spring/Summer 2010.

Economic Analysis at the Outset of Merger Review: Using Diversion Ratios to Evaluate Unilateral Effects, *The Threshold*, Volume XI, Number 1, Fall 2010.

EXPERT RETENTION, REPORTS AND TESTIMONY

In Re: First Quality Tissue SE, LLC vs. Metso Paper USA Inc. and Clearwater Paper Corp; US District Court of South Carolina, Anderson Division. Expert Reports provided in January and February 2012 on behalf of First Quality. Evaluated competitive implication of exclusivity restrictions in a contract between First Quality and Metso. Deposition in April of 2012. Trial testimony given in May 2012.

In Re: *Maher Terminals, LLC vs. The Port Authority of New York and New Jersey;* Before The Federal Maritime Commission. Expert Report provided in June 2011 on behalf of the Port Authority. Evaluated competitive implication of the thirty-year terminal lease Maher signed with the Port Authority. Deposition in August of 2011.

In Re: Federal Trade Commission vs. Laboratory Corporation of America; Before The US Federal Trade Commission, Docket No. 9345. Expert Report provided in March 2011 on behalf of the Federal Trade Commission. Evaluated antitrust implications of the acquisition of Westcliff Medical Laboratories by Laboratory Corporation of America.

In Re: Federal Trade Commission vs. Laboratory Corporation of America; US District Court for the Central District of California Southern Division. Declarations filed in December 2010 on behalf of the Federal Trade Commission. Evaluated antitrust implications of the acquisition of Westcliff Medical Laboratories by Laboratory Corporation of America. Deposition in January of 2011.

In Re: *Emigra Group, LLC v. Fragomen, Del Rey, Bernsen & Loewy, LLP, et al;* US District Court for the Southern District of New York. Expert Report filed in June 2008 on behalf of Emigra Group. Evaluated Plaintiff's claims of anti-competitive harm due to Fragomen's business practices.

In Re: *United States of America v. National Association of Realtors;* US District Court for the Northern District of Illinois Eastern Division. Expert Reports filed in August 2007 and in February of 2008 on behalf of National Association of Realtors. Evaluated claims of anti-competitive harm due to rules and policies promulgated by National Association of Realtors. Depositions in October of 2007 and in April of 2008.

In Re: Copper Tubing Litigation (Class Action); U.S. District Court for the Western District of Tennessee, Expert Report filed in November 2006 on behalf of defendants (Mueller Industries, Inc. and other copper tubing manufacturers). Provided an economic evaluation of the evidence regarding alleged collusive pricing by the defendants. Also, evaluated the implications for the U.S. marketplace of the EU's Decision on conspiratorial pricing for European copper plumbing tubing sales by these manufacturers.

In Re: *P.J. Carroll & Co. and other tobacco companies v. The Minister For Health And Children, The Attorney General And The Office Of Tobacco Control of Ireland*; The High Court - Commercial, Dublin, Ireland. Testimony provided in November 2006 on behalf of British American Tobacco. Evaluated the impact of the government's proposed bans on tobacco company promotional activities on market competition, industry profitability and aggregate sales of cigarettes.

In Re: Spartanburg Regional Healthcare Systems and the other class members. v. Hillenbrand Industries Inc, Hill-Rom Inc., and Hill-Rom Co. Inc.; U.S. District Court for the District of South Carolina, Declaration filed in October 2005 on behalf of Plaintiff. Conducted various statistical analyses on Hill-Rom economic data.

In Re: *Great Lakes Chemical Corp. v. Arkansas Oil and Gas Commission*; Circuit Court Of Union County, Arkansas, Expert Report filed in July 2005 on behalf of Great Lakes Chemical Corp. Deposition in August 2005. Analyzed the economic efficiency of Final Order No. 2-2003-01 of the Arkansas Oil and Gas Commission.

In Re: Regulatory Inquiry of Penn National Gaming, Inc.'s Acquisition of Argosy Gaming Co.; Illinois Gaming Board ("IGB"), Expert Report filed in May 2005 on behalf of Penn National. Analyzed the effects that the acquisition would have on gaming competition in Illinois in response to Section 3000.232 of the IGB Regulations.

In Re: *Teva Pharmaceuticals v. Pfizer Inc*; U.S. District Court for the District of Columbia, Affidavit filed in October 2004 on behalf of Teva Pharmaceuticals. Analyzed the effects that Pfizer's introduction of a generic version of Neurontin during the 180-exclusivity period would have on competitive entry in Gabapentin market.

In Re: Generic Drug Manufactures v. Lester M. Crawford (Acting Commissioner of the U.S. Food and Drug Administration), the U.S. Food and Drug Administration ("FDA"), and Tommy G. Thompson (Secretary of Health and Human Services); U.S. District Court for the District of Columbia, Affidavit filed in October 2004 on behalf of Teva Pharmaceuticals. Analyzed how the FDA's denial of a Citizens Petition to limit entry of branded-generics after successful Paragraph IV filings would affect competition in current and future markets for generic drugs.

In Re: *Tribune Co. v. Internal Revenue Service*; U.S. Tax Court, Expert Report filed July 2004 and Rebuttal Report filed August 2004, both on behalf of the Tribune Co. Testified in trial December 2004. Analyzed the economics of the Matthew Bender transaction between Times Mirror and Reed Elsevier.

In Re: *Teva Pharmaceuticals v. Pfizer Inc.*; U.S. District Court of New Jersey; Affidavit filed in June 2004 on behalf of Teva Pharmaceuticals. Analyzed how Pfizer's marketing of a branded-generic version of Accupril affects competition in the market for generic quinapril during the 180-exclusivity period (granted to successful Abbreviated New Drug Applications with Paragraph IV certifications).

In Re: *AT&T Broadband v. CSG Systems, Inc.*, American Arbitration Association, Denver Colorado; Report filed January 2003, Declaration filed March 2003, Rebuttal Report filed March 2003 all on behalf of CSG Systems, Inc., Deposition in March 2003. Conducted an analysis to evaluate the allegation of a MFN violation.

In Re: *Relafen Antitrust Litigation*, U. S. District Court of Massachusetts; Retained in January 2003 by Teva Pharmaceuticals. Evaluated damages from the delay in the launch of generic Nabumetone associated with GlaxoSmithKline PLC's invalid patent claim.

In Re: *Elizabeth Sadati vs. Ameritech Inc. et. al.*, Circuit Court of Cook County, Illinois, Expert Findings filed June 2002 on behalf of Ameritech. Conducted an analysis to determine level of damages.

In Re: *David E. Crooke vs. Value City Furniture*, U.S. District Court for the Northern District of Illinois, Eastern Division; Expert Report filed February 2002 on behalf Plaintiff, Deposition in May 2002. Conducted an analysis to determine level of damages.

In Re: *Linda Cichowski vs. Evanston Northwestern Healthcare*, Circuit Court of the Nineteenth Judicial Circuit of Illinois, Expert Findings filed October 2001 on behalf of Evanston Northwestern Healthcare. Conducted an analysis to determine level of damages.

In Re: Carletta L. Martinsen vs. Lockheed-Martin, U.S. District Court for the Eastern District of Wisconsin, Expert Report filed November 2000 on behalf of Lockheed-Martin. Conducted a statistical analysis on company data to determine whether there was evidence of age discrimination.

In Re: *Nine West Shoes Antitrust Litigation (Class Action)*, U.S. District Court for the Southern District of New York. Prepared affidavit in July 2000 on behalf of Nine West Shoes. My analysis

addressed whether there was any statistical evidence of a pricing conspiracy between Nine West Shoes and other major retailers regarding certain lines of women shoes.

Merger Analyses During Government Regulatory Reviews

H&R Block Inc. Attempted Acquisition of 2^{nd} Story Software, 2011. On behalf of H&R Block, conducted economic analyses of the antitrust implications of the proposed transaction and presented these analyses to the DOJ during the merger review process.

DAK Americas Acquisition of Eastman Chemical Co's PET, PTA and related performance polymers businesses, 2010. On behalf of DAK, conducted an economic analysis of the antitrust implications of the proposed transaction and presented this analysis to the FTC.

Avaya Inc. Acquisition of Nortel Networks Corp, 2009. On behalf of Avaya, conducted economic analyses of the antitrust implications of the transaction and presented these analyses to the DOJ during the merger review process.

Walgreens Co. Acquisition of Duane R eade Holdings, Inc., 2009. On behalf of Walgreens, conducted an economic analysis of the antitrust implications of the proposed transaction and presented this analysis to the FTC and the New York Attorney General's office.

Microsoft Corp. Search Outsourcing Agreement with Yahoo Inc., 2009. On behalf of Microsoft, conducted economic analyses of the antitrust implications of the proposed transaction the during the DOJ's antitrust review process.

Google, Inc. Attempted Search Outsourcing Agreement with Yahoo Inc., 2008. On behalf of Microsoft, conducted various economic analyses of the antitrust implications of the proposed transaction, and presented these analyses to the Competition, Competition Bureau and the DOJ during the antitrust review process.

Walgreens Co. Proposed Acquisition of Longs Drug Stores Corp., 2008. On behalf of Walgreens, conducted an economic analysis of the antitrust implications of the proposed transaction and presented this analysis to the FTC.

CCS Corporation Attempted Acquisition of Newpark Environmental Services, 2008. On behalf of the FTC, conducted various econometric analyses of the antitrust implications of the transaction during the FTC's merger review process.

Microsoft Corp. Attempted Acquisition of Yahoo Inc., 2008. On behalf of Microsoft, conducted various economic analyses of the antitrust implications of the transaction during the DOJ's merger review process.

Thomson Corp. Merger with Reuters Group, PLC, 2008. On behalf of the companies, conducted various economic analyses of the antitrust implications of the transaction during the DOJ's merger review process.

Houghton Mifflin Co. Acquisition of Harcourt Publishing Co, 2007. On behalf of Houghton Mifflin, conducted various economic analyses of the antitrust implications of the transaction during the DOJ's merger review process.

Staples Inc. Acquisition of Corporate Express, 2007. On behalf of Staples, conducted various econometric analyses of the antitrust implications of the transaction during the FTC's merger review process.

Monsanto Company Acquisition of Delta & Pine Land Co., 2007. On behalf of Monsanto, conducted economic analyses of prospective efficiencies of the transaction during the DOJ's merger review process.

Sherwin-Williams Co. Acquisition of MAB Paints, 2007. On behalf of Sherwin-Williams, conducted economic analyses of the antitrust implications for various local markets during the FTC's merger review process.

Getty Images Acquisition of MediaVast (WireImages), 2007. On behalf of Getty Images, conducted economic analyses of the antitrust implications of the transaction during the DOJ's merger review process.

Hoover Co. Acquisition by Techtronic Industries Co.Ltd. (TTI), 2007. On behalf of Whirlpool (Hoover), conducted economic analyses of the antitrust implications of the transaction during the DOJ's and State of Ohio's merger review process.

EnergySolutions Acquisition of Duratek, 2006. On behalf of Energy*Solutions* (Envirocare of Utah), conducted economic analyses of the antitrust implications of the transaction during the DOJ's merger review process.

Whirlpool Corp. Acquisition of Maytag Corp., 2006. On behalf of Whirlpool, conducted economic analyses of the antitrust implications of the transaction during the DOJ's merger review process.

The Home Depot Acquisition of Hughes Supply, 2006. On behalf of both parties, conducted economic analyses of the antitrust implications of the transaction during the DOJ's merger review process.

SemGroup Proposed Acquisition of TransMontaigne, 2006. On behalf of SemGroup, conducted economic analyses of the antitrust implications of the transaction during the FTC's merger review process.

Teva Pharmaceuticals Acquisition of Ivax Corp., 2005. On behalf of the merging parties, conducted economic analyses of the antitrust implications relating to the acquisition during the FTC's merger review process.

GameStop Corp. Acquisition of Electronics Boutique Holdings Corp ("EB"), 2005. On behalf of EB, conducted an economic analysis of the antitrust implications relating to the acquisition during the FTC merger investigation.

Kodak Polychrome Graphics ("KPG") Acquisition of Creo Inc., 2005. On behalf of KPG, conducted an economic analysis of the antitrust implications relating to the acquisition during the U. S. Department of Justice ("DOJ") and European Union ("EU") merger investigation.

Crompton Corp. Acquisition of Great Lake Chemical's Corp, 2005. On behalf of Crompton, conducted an economic analysis of the antitrust implications relating to the acquisition during the FTC and EU merger investigation.

Reuters Group PLC. Acquisition of Moneyline Telerate, 2005. On behalf of Reuters, conducted an economic analysis of the antitrust implications relating to the acquisition during the DOJ and EU merger investigation.

Sherwin-Williams Co. Acquisition of Duron Inc., 2004. On behalf of both companies, conducted an economic analysis of the antitrust implications relating to Sherwin-Williams' proposed acquisition of Duron's paint distribution business during the FTC investigation.

FTC investigation of Itron Inc. acquisition of SEM; Retained in January 2004 by the U.S. Federal Trade Commission ("FTC") to provide an analysis and testimony regarding the antitrust implications of the proposed acquisition.

Vestas Wind Systems A/S Acquisition of NEG Micon A/S, 2004. On behalf of both companies, conducted and presented an economic analysis of the antitrust implications relating to Vestas' proposed acquisition of NEG Micon's wind turbine business during the DOJ and EU investigation.

Kluwer Academic Publisher's Acquisition of Bertelsmann AG's academic publishing division, 2003. On behalf of Kluwer, conducted and presented an economic analysis of the business rationale and antitrust implications relating to Kluwer's proposed acquisition of Bertelsmann's academic journal publishing division during the DOJ investigation.

Pfizer Inc. Acquisition of Pharmacia Corp., 2002. On behalf of Pfizer, conducted an economic analysis on the antitrust implications associated with the merger and various licensing agreements during the FTC investigation.

Medtronic Inc. Acquisition of Spinal Dynamics Corp., 2002. On behalf of Medtronics, conducted an economic analysis of the business rationale and antitrust implications of the acquisition regarding the companies' artificial cervical disc businesses during the FTC investigation.

EBay Inc.'s Acquisition of PayPal Inc., 2002. On behalf of EBay, conducted and presented an economic analysis of the business rationale and antitrust implications of EBay's acquisition of PayPal's electronic payment system during the DOJ investigation.

Zebra Technology Corp.'s Proposed Acquisition of Fargo Electronics Inc., 2001. On behalf of both companies, conducted and presented an economic analysis on the acquisition's antitrust implications for ID printers during the FTC and EU investigation.

Bayer Aktiengesellschaft Acquisition of Lyondell Chemical Co.'s Polyether Polyols Division, 2000. On behalf of the companies, conducted an economic analysis on the acquisition's antitrust implications for the polyol industry during the FTC and EU investigation.

Other Significant Engagements

In Re: *United States Food and Drug Administration's Tobacco Products Scientific Advisory Committee (TPSAC) hearing*, February 2011. Conducted and presented an economic analysis on behalf of Lorillard Tobacco Co. estimating the potential size of a black market in menthol cigarettes emanating from a federal ban on menthol cigarette sales.

In Re: *Maine Yankee Atomic Power Co. v. United States*, United States Court of Federal Claims; Conducted an economic analysis on behalf of the DOJ and U.S. Department of Energy to assess the efficiency and estimated pricing of Plaintiff's economics experts proposed waste disposal scheme.

In Re: *CSC Holdings, Inc. v. Yankees Entertainment and Sports, LLC.*, American Arbitration Association, New York NY; Arbitration Proceeding in March 2004. On behalf of Yankees Entertainment and Sports, help develop and evaluate survey of New York area cable viewers. Analyzed CSC's economic experts' reports and testimony.

Relevant Antitrust Market for PepsiCo Products, 2004. On behalf of the company conducted an econometric analysis to assess the relevant markets for some of its drink and food offerings.

Relevant Antitrust Market for Purdue Pharma L.P Products, 2001. On behalf of the company conducted an analysis to assess the relevant market for its drug offerings.

In Re: Falise, et al. vs. American Tobacco Co., et al., U.S. District Court for the Eastern District of New York. Conducted a statistical analysis supporting Nobel Laureate James Heckman's expert report and testimony regarding the responsiveness of smoker's initiation and quit rates to information regarding the dangers of smoking. Report filed on behalf of the cigarette companies in June 2000.

In Re: *Blue Cross and Blue Shield of New Jersey vs. Philip Morris Inc. et al.*, U.S. District Court For the Eastern District of New York. Conducted a statistical analysis in support of Nobel Laureate James Heckman's expert report and testimony on behalf of the cigarette companies. Report filed October 1999.

RESEARCH PRESENTED AT THE FOLLOWING PROFESSIONAL SEMINARS

CONFERENCE PROCEEDINGS

Atlantic Economics Society Conference, Philadelphia, Pennsylvania, October 1993.

Conference in Memory of Yoram Ben Porath, Jeruslem, Israel, October 1993.

Conference on the Interoperability and the Economics of Information Infrastructure, Strasbourg,

France, June 1996.

Telecommunications Policy Research Conference, Alexandria, Virginia, September 1997.

Academy of International Business Annual Meetings, Monterrey, Mexico, October 1997.

Econometrica North American Summer Meetings, Montreal, Canada, June 1998.

Western Economic Association Summer Meetings, San Diego, California, July 2006. Chaired session on the empirical evidence linking cigarette advertising to youth smoking.

UNIVERSITY SEMINARS 1993-PRESENT

Baruch College

Columbia University

Duke University

Harvard University

Michigan State University

New York University

Northwestern University

Princeton University

Stanford University

State University of New York-Albany

University of Alberta

University of California-Berkley

University of California-Irvine

University of Chicago

University of Miami

University of Michigan-Ann Arbor

University of Wisconsin-Madison

Western Ontario University

PRESENTATIONS AT OTHER RESEARCH INSTITUTIONS 1993-PRESENT

U.S. Department of Labor - Bureau of Labor Statistics

Rand Corporation

American Medical Association

U.S. Department of Justice

U. S. Federal Trade Commission

PROFESSIONAL MEMBERSHIP AND SERVICES

MEMBERSHIP IS PROFESSIONAL SOCIETIES

American Bar Association
American Economic Association
Atlantic Economic Society (1993-1994)

Society of Labor Economists (1996-1997)

REFEREE FOR THE FOLLOWING PROFESSIONAL JOURNALS (1995-PRESENT):

Atlantic Economic Journal

Journal of Political Economy

Journal of Labor Economics

International Journal of Industrial Organization

Quarterly Journal of Economics

Review of Economics and Statistics

Journal of Human Resources

Journal of Law and Economics

Journal of Industrial Economics

Japan and the World Economy

APPENDIX 2: MATERIALS RELIED UPON

Expert Reports and Testimony:

- 1. Expert Report of Gregory S Vistnes, Ph.D. to Competition Bureau, June 22, 2012, CT-2011-003
- 2. Witness Statement of Gary Simonson of CREA before the Competition Bureau, August 3, 2012, CT-2011-003
- 3. Witness Statement of John Pasalis, Realosophy Realty Inc., June 20, 2012, CT-2011-003

CREA, Local Boards and Associations Documents:

- 1. CREA, "Innovative Members", 2010 (CREA00034125)
- 2. "Interim Broker Reciprocity Task Force Report", (CREA00031060)
- 3. The London and St. Thomas Real Estate Board, "Schedule A Broker Reciprocity, Proposed MLS® Rules and Regulations (CREA00029813);
- 4. Toronto Real Estate Board, "Internet Data Exchange ("IDX") Data Agreement", November 10,2011 (TREB-S000003)

Data Sources:

- 1. Statistics Canada. Table 358-0122 Canadian Internet use survey, Internet use, by location of access, Canada, provinces and selected census metropolitan areas (CMAs), every 2 years (percent).
- 2. Statistics Canada. 2007; Highest level of educational attainment for the population aged 25 to 64 percentage distribution for both sexes for Canada provinces and territories and census metropolitan areas and census agglomerations 20% sample data (table).

Books:

1. Carlton & Perloff, Modern Industrial Organization, 4th Edition

News Reports:

1. Jennifer Plotnick, "REALTORS® Discuss Impact of Competing Listing Service in Bakersfield, Calif.", *The Bakersfield Californian*, September 3, 2004

Other documents:

1. National Association of Realtors, "Profile of Home Buyers and Sellers 2011", 2011 (CREA-S000924)

Websites:

- 1. http://en.wikipedia.org/wiki/List of neighbourhoods in Toronto (accessed August 2, 2012)
- 2. http://suburbantorontorealestate.com/sellers/how-much-is-my-house-worth/ (accessed August 2, 2012)
- 3. http://www.blogto.com/neighbourhoods/ (accessed August 2, 2012)
- 4. http://www.crea.ca/organization (accessed August 1, 2012)
- 5. http://www.mls-cornwall.com/page/our-community.aspx (accessed August 6, 2012)
- 6. http://www.primetorontoneighbourhoods.com/how-much-is-my-home-worth/ (accessed August 2, 2012)
- 7. http://www.ramforhomes.com/toronto_neighbourhoods (accessed August 2, 2012)
- 8. http://www.torontoneighbourhoods.net/ (accessed August 2, 2012)
- 9. http://www.toronto.ca/demographics/neighbourhoods.htm (accessed August 2, 2012)
- 10. http://www.zoocasa.com/en/zoopraisal (accessed August 2, 2012)
- 11. http://torontorealestatelibrary.tv/how-much-is-my-home-worth-2 (accessed August 2, 2012)

APPENDIX 3: ACKNOWLEDGEMENT OF EXPERT WITNESS

- I, Fredrick A. Flyer, acknowledge that I will comply with the Competition Tribunal's code of conduct for expert witnesses which is described below:
 - 1. An expert witness who provides a report for use as evidence has a duty to assist the Tribunal impartially on matters relevant to his or her area of expertise.
 - 2. This duty overrides any duty to a party to the proceeding, including the person retaining the expert witness. An expert is to be independent and objective. An expert is not an advocate for a party.

August 13, 2012

Fresh H a Sky