Introduction
As real estate becomes more complex, disputes are inevitable, and the need for the services of a forensic appraiser increases. Demand for forensic appraisal services tends to correspond to the ebb and flow of the economic cycle. During an economic downturn or recession, there is a greater need for the services of a forensic appraiser, and the reverse holds true when the economy is expanding or performing well. Before describing the practical role of a forensic appraiser in the broad discipline of real estate appraisal, a definitional framework is essential.
Appraisal practice
The Canadian Edition of The Appraisal of Real Estate² describes the practice of the appraisal profession as follows:
Appraisers perform analyses and render opinions or conclusions relating to the nature, quality, value or utility of specified interests in, or aspects of, identified real estate. Appraisal is defined as the act or process of estimating value. An appraisal is an estimate of value. Real estate appraisal involves selective research into appropriate market areas; the assemblage of pertinent data; the use of appropriate analytical techniques; and the application of knowledge, experience, and professional judgement to develop an appropriate solution to an appraisal problem.

Forensic appraisal
The following definition of forensic appraisal is a modification of the term forensic engineering taken from Black’s Law Dictionary, 6th ed., Centennial Edition (1891-1991):
The application of the principles and practice of appraising to the elucidation of questions before courts of law or quasi-judicial boards. Practiced by legally or professionally qualified appraisers who are experts in their field, by both education and experience, and who have experience in the courts and an understanding of jurisprudence. A forensic appraisal engagement may require investigations, studies, evaluations, reports, advice to counsels, advisory opinions, depositions, and/or testimony to assist in the resolution of disputes relating to real property and real property rights in cases before courts, or other lawful tribunals.
The preceding definition of forensic appraisal is similar to that adopted by the Appraisal Institute, and found in The Dictionary of Real Estate Appraisal, 4th ed., 2002, at page 119:
Valuation for litigation (or for potential litigation) purposes, i.e., the application of the principles and practices of appraisal to the clarification of questions before courts of law (or situations that may come before courts of law such as divorce settlements or insurance claims settlements made before actual litigation has begun).

Role of the forensic appraiser
The forensic appraiser is involved in many aspects of real estate such as those assignments that are intended for court or tribunal. Some of the areas in which the forensic appraiser may be involved include, but are not limited to:
• mortgage loan portfolio reviews
• mortgage fraud investigations
• mortgage debt recovery exercises
• property profile reconstruction
  (historical ownership, title research, occupancy, use, etc.)
• preparation of appraisals and appraisal reviews for professional negligence claims, power of sale proceedings, partnership or marital disputes, damage claims, insurance claims, and expropriation
• development of valuation theory and models
• assistance to legal counsel prior to and during court proceedings
• ground lease and space rental disputes and arbitration

Skill-set requirements
The forensic appraiser requires a broad and diverse skill-set to address the many potential problems encountered in real estate forensic appraisal work. A forensic appraiser should possess:
• an inquisitive mind as well as strong research and analytical skills
• a good attention span and an ability to focus on detail
• an ability to deal with and present complex problems in a systematic and non-technical manner
• an ability to listen, communicate effectively, and work as a team player
• a strong background in valuation theory and practice, as well as generally accepted appraisal principles and practices
• an understanding of land use controls and planning policies
• an understanding of the registry and land title systems and related title documents
• an understanding of regulatory appraisal requirements

• a general understanding of real estate law and evidentiary issues
• an accreditation from a recognized professional real estate organization such as the U.S Appraisal Institute (MAI) and the Canadian Appraisal Institute (AACI), with rigorous academic and practical designation requirements and a commitment to appraisal standards and ethical requirements²
• a commitment to continuing post-designation education

An effective forensic practice must maintain an extensive library of appraisal literature and real estate case law, and have access to a multiple listing service (MLS). Further, as many disputes can take years before they reach court/tribunal and a forensic appraiser is retained, it is important to have access to both current and historical real estate data bases, macroeconomic and microeconomic data bases, zoning and official plan documents, and transactional data (sales and leases).

Pre-engagement
A forensic appraiser should not commit to an engagement unless he or she is satisfied that no pressure will be brought to bear to achieve a preconceived or desired result, and that a professional working relationship can be fostered and sustained. Whether a client’s objective is realistic and achievable can seldom be ascertained initially without undertaking some preliminary investigations.
Sometimes there may not be a clear client objective, and the assignment is truly exploratory, with future actions dependent on what is uncovered in the process of the initial forensic investigation.
However, one must always maintain his or her independence and objectivity, without which the forensic appraiser has nothing to offer by way of professional expertise, litigation support, and expert testimony. Any concern that legal counsel might attempt a nominal retainer only to

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keep the appraiser from potentially being hired by opposing counsel can be pre-empted at the initial pre-engagement encounter by simply requesting that no confidential or privileged information be provided.

**Preliminary assessment and engagement**

If an action or quasi-judicial proceeding has been commenced, it is advisable to have a clear understanding of the issues in dispute. A prerequisite to involvement in a contemplated court case or quasi-judicial hearing should include a review of all applicable file documentation, which may include:

- Statement of Claim
- Statement of Defense
- Agreed Statement of Facts
- Examinations for Discovery
- Existing appraisal reports
- Existing review appraisal reports
- Other related reports (i.e., environmental audits, building condition reports, etc.)
- File memoranda

Only after conducting an independent preliminary review of the file is it possible to discuss with legal counsel the type and extent of research that could or should be undertaken to properly address the issue(s) in dispute. Acceptance or rejection of the legal premise of the case is irrelevant, as the role of the forensic appraiser is to address both sides of the dispute in an objective and unbiased manner.

As litigation is costly, the appraiser has an obligation and professional responsibility to point out the strengths and weaknesses of the client's case with respect to the valuation issue(s) in dispute, and to develop a problem-solving strategy that is cost-effective, appropriate and timely. Often, a phased approach is the best strategy, with the appraiser reporting his or her progress and findings to counsel weekly, bi-weekly, or monthly, depending on the nature and complexity of the assignment. Counsel should be kept fully informed at all times throughout the investigative process.

Once retained, an open dialogue and co-operative spirit must be established and maintained with counsel and any other professionals involved in the assignment. As counsel develops its theory and new theories emerge, or opposing counsel advances its theory, or proposes new theories, the forensic appraiser will be called upon to provide ongoing litigation support by way of advice and research, including preparation of reports for internal use and/or legal proceedings. Be prepared to speak frankly to legal counsel about any findings, whether favourable or unfavourable.

Forensic appraisal work is demanding and challenging, and can be all-consuming. A file can go on for years, punctuated by a series of stops and frantic starts. Success in forensic appraising is measured by the ability to help counsel resolve disputes before they get to court or arbitration.

**Tales from the forensic files**

Over the years, a number of forensic investigations involving a variety of valuation issues have been undertaken. A sample of the investigations undertaken and the findings stemming from those investigations are briefly described in the following case summaries.

**Altered affidavits and tainted transactional data**

As part of an investigation of a lender's portfolio of residential mortgage loans, a number of form appraisals were examined. Background checks on each property included a search of the MLS of the local real estate board. It soon became apparent that the asking prices on the expired listings of the appraised properties were less than the appraised values.

Because of the concerns raised by the initial findings, a title search of each property was undertaken. A close examination of each title deed revealed that the consideration shown on the affidavit page had been altered and significantly increased to suggest a much higher purchase price. There was a pattern of collusion in every instance involving the same appraiser and the same lawyer.

It is likely that a co-operating mortgage underwriter facilitated these same transactions. By declaring a much higher purchase price, a higher loan amount than was warranted was obtained. An unfortunate spin-off effect is the tainting of the transactional data pool on which appraisers rely in monitoring residential price trends and developing estimates of value.

**Creating value – fabricated transactional data**

On review of an appraisal of a commercial property in mid-town Toronto, it seemed remarkable and rather fortuitous that the appraiser was able to find five recent comparable sales, all reflecting a consideration of $1,200,000. The appraiser must have perceived a rising market, as he appraised the subject property at $1,250,000, some $50,000 more than the value suggested by the five perfect comparable sales. What are the odds of such good fortune befalling the appraiser to have been blessed with such excellent transactional data? It didn’t take much for the alarm bells to go off. As it turned out, although the five comparable sales had actually taken place, the reported sale prices of four of the transactions were fraudulently misstated. All five
properties were very dissimilar with the lot and building areas grossly inaccurate, and the locations of three of the properties far removed, two of which were in an entirely different region from the subject property. Further, the appraiser failed to mention the pending sale of the subject property at $1,125,000, with the vendor reportedly receiving only $1,025,000 as the prospective purchaser paid $100,000 to buy out an existing retail tenant.

**Inadequate lease and zoning analysis**

An investigation was undertaken of the valuation of two failed gas bars in connection with a claim for negligence brought by a financial institution against an appraisal company and two of its appraisers. The two recently constructed discount gas bars carried the same corporate banner (one anchored by a variety store and the other by a donut shop and tunnel car wash). They were situated nearly opposite each other on a stretch of a two-way road allowance (not at an intersection) in a community with a population of less than 10,000. The average daily traffic volume along the roadway on which the gas bars were situated was less than 4,500 vehicles. Both gas bars were under long-term 10-year leases, with options to renew. In addition to the obvious lack of economic viability of either new gas bar, and both being in direct competition with each other for gasoline sales, the appraisers failed to notice that the leases showed the tenants and landlords of both facilities as having the same corporate mailing address. Further, even though the appraisers claimed to have read the leases, they failed to distinguish between landlord and tenant improvements. Both properties were grossly overvalued based on the non-arm’s length leases. Our investigations and reviews brought about an out-of-court settlement at an undisclosed amount.

On another occasion, a “post mortem” was conducted on a small quasi-retail strip plaza, which at the time of our investigation was entirely vacant. In reconstructing the fate of this facility, the documentation in the original loan file was examined. All there was to go on was the appraisal report relied upon by the lender when the loan was advanced, and the leasing information in the loan file. The facility consisted of a four-unit quasi-retail strip plaza of 6,400 square feet, and a discount gas bar and kiosk zoned highway commercial. Some 1,800 square feet of the facility had never been occupied, although a donut shop was slated to occupy the space. On-site parking was available for 24 vehicles. The lease in respect of a fast food takeout pizza establishment occupying 1,000 square feet of the strip plaza was for a term of five years, with three five-year renewal options. The rent was fixed at the same rate during the initial five-year lease term and the first two five-year renewal option periods. Two other units comprising 3,600 square feet were leased for a term of five years and 10 years. The gas bar and kiosk was under a separate five-year lease.

Why the rest of the strip plaza (the 1,800 square feet proposed donut shop) had never been leased was a mystery until the other leases were summarized and the zoning by-law and its parking provisions analyzed. According to the zoning by-law, the space that had been occupied by the pizza establishment required a minimum of 10 parking spaces, and 14 parking spaces were required to support the other two quasi-commercial tenants and the gas bar and kiosk. With no additional parking available to accommodate the proposed 1,800 square feet donut shop, no occupancy permit would be issued. As long as the pizza lease remained in effect, the remaining 1,800 square feet of quasi-retail space in the strip plaza could not be leased, and would remain sterilized (except for use as storage).

The appraiser never read the leases or the zoning by-law, and certainly did not link the two together to assess their collective impact on the utility and value of the property. The appraiser also overlooked other critical factors, including $343,000 in tenant inducements, which should have been accounted for in establishing the net effective rent (market rent). Consequently, the quasi-retail facility was grossly overvalued.

**Faulty and inadequate appraisal practices**

Using syndicated mortgage funds through a mortgage broker involving investment by thousands of individuals, a real estate developer financed his development projects. His operations were investigated by the provincial government, and included a shopping centre with office space. Financing of this project was supported by an appraisal commissioned and prepared on behalf of the developer, indicating a market value of $29,000,000. As part of the investigation, a review of the appraisal was undertaken, from which it became evident that many of the retail tenancies were not arm’s length and the rental income attributed to their space was not sustainable. It was also obvious from the names of the retailers, that many were not commonly recognized within the retailing industry. As for the bona fide tenants, a number of which were provided rent-free periods, rental payments were either absolute net or semi-gross. The appraiser who prepared the report on which the loan was funded made no independent inquiries as to the legitimacy of the leases or confirmation through analysis of rents in competing facilities of the reported rents as being at market.

While accepting the existing reported lease rents at face value, inappropriately treating all of the lease rents as net absolute (fully net) and relying on them in estimating the value of the property, the appraiser incorrectly claimed to be estimating the market value of the ‘fee simple’ interest. The inappropriate leases and grossly overstated rents provided for an artificial occupancy of 94.1%, which the appraiser stabilized at 95.0%. This grossly overstated income, after adjustment for non-recoverable expenses, was valued on the basis of a 10-year Discounted Cash Flow (DCF) model. Some allowance was made for leasing commissions when the leases rolled over, with the rents fixed for five-year terms. Based on a discount rate of 12%, which was linked to an annual inflation factor of 5% compounded annually, the appraiser concluded with a value estimate of $29,000,000. An inflationary component of 5% coupled with a discount rate of 12% results in an overall capitalization rate (i.e., real rate of return) of 6.67% (1.12 ÷ 1.05 = 1.0667).

Despite the appraiser stating that the property was zoned ‘light industrial,’ and listing “most assembly and manufacturing uses within a wholly enclosed building... [and] other uses includ[ing] retail and service outlet if accessory to a manufacturing use, restaurant, production and transmission establishment, public
garage, car wash, parking lot and light service shops” as permitted uses, and that “[t]he official plan...designates the subject property and surrounding lands... as industrial,” remarkably, the appraiser concluded that “[t]he subject property’s existing use appears to be a legal and conforming use under the existing zoning designation” and that “the highest and best use of the subject property is the continuation of the existing use as a[n] enclosed retail mall and office complex.” Also, the building area represented 94.1% of the site area, even though according to the appraiser the permitted gross floor area was restricted to 87.3% of the lot area. Parking requirements were not mentioned, nor was there any indication given of the availability and number of on-site parking spaces to support the existing retail and office complex.

A superficial and meaningless cost approach, with an unsupported land and building value, for this income-producing facility was included in the report. Actual costs of the recently constructed facility (which included retention of some old skeletal industrial structures) were not disclosed, and acquisition particulars of the property were not provided even though the property had been acquired within three years of completion of the project.

Because of the significant shortcomings of the original appraisal and concern over the reported value of $29,000,000, an updated appraisal from a different appraiser was commissioned, which indicated a maximum value of $5,000,000 for the facility, only 12 months after the date of the original appraisal. It appears that the original appraiser had questionable experience with this type of real estate, and failed in his professional obligations by blindly accepting information from the property owner.

Deficient mortgage underwriting practices
A review was undertaken of the mortgage portfolio of a financial institution when their lending practices were called into question. As a starting point, a computer printout of the entire mortgage loan portfolio was obtained. From the printout, some two dozen specific loans were selected for a thorough review, for which the complete loan file was examined. One of the loans made in respect of a new medical office building, located near a hospital, was in default, and while there were many critical deficiencies in the appraisal report that had been relied upon in making the loan, the underwriting left much to be desired. The total loan amount had been advanced even though the building was not fully occupied, which would have been evident from inspection of the building and confirmation of individual tenant occupancies. A pencilled notation in the file showing a figure multiplied by 12 formed the basis on which the full loan amount had been advanced. This figure had been misconstrued as the monthly rental when, in fact, it was representative of the annual rental income from the complex, which was mostly unoccupied. Further, a license for the lab could not be obtained from the Province, and the pharmacy was not required to pay rent until the building had been issued a lab license and achieved a certain percentage of occupancy.

As for the appraisal, prepared on an ‘assumptive’ premise, but for the sloppy underwriting and a desire not to go public, and depending on the instructions to the appraiser, a case might have been made to pursue a claim of negligence against the appraiser, even though the lender was contributarily negligent. A value estimate based on an ‘assumptive’ premise is not an indication of the market value of the property in its ‘as is’ condition. Without the lab license, the property could not attract doctors as tenants, and the value of the property was severely diminished.

In another instance, the mortgages on two prime single-tenant industrial properties, each leased to a government agency, had gone into default. The property owner was a lawyer. A search of title revealed that both properties were encumbered by a number of mortgages that, in total, exceeded the market value of each property. It turned out that the lawyer had secured financing from a number of financial institutions, each believing that they held a valid first charge against the properties. All of these financial institutions had allowed the property owner to perform the legal work on his own behalf to their financial detriment. The good news was that our lender client held the only valid first mortgage registered against each property.

Conclusion
As illustrated by the sample of case studies presented, sometimes the forensic efforts produced unexpected and surprising findings. In the forensic files mentioned, an appraiser sensitive to the need for sound appraisal practices would have been able to prevent many of the problems and attendant financial losses from ever having occurred. An absence of independent verification of property-specific information was a major contributing factor to the financial losses sustained in all of the forensic files examined. Protecting against fraud requires financial institutions exercise prudence in their underwriting practices and to be vigilant in their appraisal review functions, whether performed internally or externally.

End notes:
2 An undesignated individual has not been tested for competency, has no obligation to follow generally accepted appraisal standards, and does not have to adhere to the ethical obligations imposed by the professional body.