# **Changes to the Comprehensive Review Process**

# By David Brubacher, O.L.S., O.L.I.P. on behalf of the Survey Review Department Committee

The Survey Review Department Committee is implementing changes within the Survey Review Department to make its processes more efficient, effective and transparent. This article describes recent changes to portions of the comprehensive review process.

### Introduction

The principal mandate of the Survey Review Department of the Association of Ontario Land Surveyors is to ensure that all firms and government agencies producing Plans of Survey for the public do so in a competent manner. The mandate is carried out, in part, by a *comprehensive review* of randomly selected surveys, supported by project files, research, field work, plans and reports. The principal aim of a comprehensive review is to create a dialogue between the survey community and the Association with the result that surveys across the province have a consistent quality and reliability. Even though the principal object of this dialogue is education, serious violations of the Standards and Regulations may be referred to the Registrar for further investigation.

Each firm or government agency can expect to be reviewed once every five years, which equates to about sixty (60) comprehensive reviews conducted by the Survey Review Department (SRD) per year. Prior to the new plan selection formula, more than four hundred (400) plans and files were normally required to carry out these reviews, or about seven (7) or eight (8) plans and files per firm.

At the beginning of a comprehensive review the SRD Manager requests a number of plans and files from the firm. The onus is on the firm to assemble all of the relevant information and submit it to the SRD, whereupon the review and accompanying field and office examinations are scheduled and carried out.

Performing a comprehensive review requires significant effort on the part of the SRD and the firm being reviewed. It is therefore critically important that the SRD efforts are focused appropriately so that firms producing consistently high quality surveys are not overly burdened by the process of assembling a larger submission than is absolutely necessary. Conversely, there should be more resources available to firms that would benefit from the additional feedback and assistance that result from submitting a larger set of files for review. The SRD Committee has addressed these issues by developing a new formula for determining the number of plans and files requested during a comprehensive review. The formula should significantly improve the efficiency and effectiveness of comprehensive reviews because it focuses the efforts of the SRD where they are most needed. Transparency is improved because the formula allows a firm to accurately predict the number of plans and files that will be requested for its next review, thus removing any perception of bias.

# **The New Formula**

The formula devised by the SRD Committee has a number of steps, described here in detail. We will use three example firms as we work through the formula to make it easier to understand. These firms are imaginatively named *Firm A*, *Firm B* and *Firm C*.

Step 1. Every Cadastral member in a firm starts with a base number of two (2) plans.

Until now we have referred to *firms* being subjected to a comprehensive review. This formula shifts the focus slightly so that each member in a firm has a base number of two (2) plans. For example Firms A and C are operated by a single member so each firm's base number is two (2) plans, while Firm B is operated by two (2) members and that firm has a base number of four  $(2 \times 2)$  plans.

Step 2. The *systematic review* adjustment is calculated. The adjustment can be zero (0), one (1) or three (3) plans.

A systematic review is another way the SRD fulfills its mandate. Systematic reviews are carried out once per year for every firm and government agency that produces Plans of Survey for the public. The department selects a single plan produced by a firm to ensure it is complete, correct and in compliance with Standards and Regulations. If there are any issues with the plan, the SRD corresponds with the firm for clarification.

Systematic reviews are therefore an indicator of a firm's recent quality. The formula uses the results of the last two systematic reviews to potentially increase the number of plans requested for the comprehensive review. If clarification was required in one of the two years, a single plan and file is added to the request. If clarification was required in both years, one plan is added per year and an additional plan is added so the SRD can provide additional assistance to a firm that is potentially struggling with quality.

For example, the systematic reviews of Firm A in 2007 and 2008 resulted in no requests for clarification from the SRD, so no plans were added to Firm A's base number. Firm B, however, required clarification in 2007, so a single plan was added to the base number. Firm C required clarification for both 2007 and 2008, so a plan was added for 2007, another

# **Testing the Formula**

The SRD Committee tested the new formula by applying it to the group of firms reviewed in 2008 and to the group of firms scheduled to be reviewed in 2009. These two groups represent more than 40% of the membership.

Relevant input data was supplied with all identification removed so there would be no chance of identification or bias.

The formula results were presented to the SRD Manager to compare with actual results. For the 2008 data, in all cases the formula correctly reduced the number of plans to be reviewed for those firms producing consistently good work and increased or maintained the number of plans to be reviewed for those firms who would benefit from additional guidance.

The 2009 formula results were consistent with expectations gleaned from the previous comprehensive review and all systematic reviews.

for 2008 and another because clarification was required for both years, totalling three (3) additional plans.

Step 3. The Comprehensive Review adjustment is calculated.

A firm's previous comprehensive review generated a score. This score is the total of all demerits found on all reviewed plans and files. The score is divided by the number of plans to determine the average demerits per plan, and this average determines the comprehensive review adjustment based on the table to the left.

For example, Firm A has an average score of seven (7), so the adjustment is zero (0). Firm B has an average score of 17.5, so the adjustment is two (2). Firm C has an average score of 24 so their adjustment is five (5).

Step 4. Subtotal the plan request

Step 5. The Solo OLS adjustment is calculated.

A Solo OLS is a cadastral member operating an office or branch office without other cadastral members regularly present. Without further adjustment, Firm A in our example would only submit two plans, but could potentially have created Reference Plans, Surveyors Real Property Reports, Subdivisions, Condominiums and perhaps other types too.

The Solo OLS adjustment is designed to ensure that a review is truly comprehensive and therefore sets a minimum of four (4) plans. In our example, Firm A has a Solo OLS adjustment of two (2), bringing the total to four (4). Firm B has an adjustment of zero (0) because there are multiple cadastral members and Firm C has an adjustment of zero (0) even though the firm is operated by a Solo OLS because the firm has already exceeded the minimum of four (4) plans.

Step 6. The New Practice adjustment is calculated

None of the example firms is a new practice. A new practice

Average	Adjustment
0 to $< 4$	-1
4 to < 12	0
12 to < 15	+1
15 to < 18	+2
18 to < 21	+3
21 to < 24	+4
24 to < 26	+5
26 to <27	+6
27 or greater	+8
0	

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is almost always subjected to a comprehensive review after its first year of operation, but there isn't any historical information available – there's no back sight – from which to determine the number of plans to select. The new practice adjustment ensures that a minimum of five (5) plans is requested.

Step 7. The *manual override* is determined

Unlike all other components of this formula, the manual

Firm	Base Score	Systematic Adjustment	Comprehensive Adjustment	Subtotal
Firm A	2	0	0	2
Firm B	4	1	2	7
Firm C	2	3	5	10

override is entirely subjective and is only for occasional use.

Adding an override precipitated a subtle but important change to the Terms of Reference of the SRD Committee that dramatically improves the transparency of the whole process. The SRD Manager must now submit to the Committee for approval a spreadsheet showing the plan request formula calculations for each firm to be reviewed in the next calendar year, together with a justification for any override. All data submitted to the Committee has had identification information removed, so the justification for an override cannot, in any way, be based on *who* is at the firm. It can only be based on *what* the firm has or hasn't done in the past.

Step 8. Total the plan request

Firm	Subtotal	Solo	<b>New Practice</b>	Override	Total
	from Step 4	Adjustment	Adjustment		
Firm A	2	2	0	0	4
Firm B	7	0	0	0	7
Firm C	10	0	0	0	10

#### **Expected Results**

Based on our testing, in 2008 the formula would have reduced plan and file requests by more than 20%, or about 88 plans and files. Firms with consistently good performance would generally have seen a reduction and in some cases, dramatic drops. Firms that would have benefited from additional guidance would have seen increases.

The SRD began using the new formula for requests beginning in January 2009. Unfortunately, some firms had already received their requests, submitted their plans and files and been subjected to review so we were not able to capture all of the potential savings we otherwise would have. As a result, the Committee expects a smaller reduction of approximately

#### 15% to 17%, or about 70 plans and files.

Feedback from the members who have experienced the new formula has been overwhelmingly positive.

changed the automatic referral limit to 25 demerit points per plan, as indicated by the orange line, to better represent the quality and reliability that is expected of an Ontario Land Surveyor.



## **Automatic Referral**

As discussed in the introduction, serious violations of the Standards and Regulations may be referred to the Registrar for further investigation. Despite the best efforts of the SRD, a few firms are consistently scoring poorly on comprehensive and systematic reviews. A typical graph of average scores for any year is shown below. The red line indicates the previous average score of 32.5 demerit points per plan that causes an automatic referral to the Registrar. The Committee has The committee has also instructed the SRD Manager to further reduce the demerit point emphasis on blunders that do not adversely affect the public trust in documents we create. Put simply, forgetting to put a North Arrow on ten plans, though careless and in need of correction, is not nearly as serious as a failure to do proper research.

# Conclusion

Earlier this year, the membership voted in favour of the new bylaw respecting the plan log rules and form. That change and the changes outlined in this article are the first of a continuing series of changes, which are being implemented by the SRD Committee, whose goal is to make the Survey Review Department more efficient, effective and

#### transparent.

After careful consideration, we trust you will agree that these changes represent significant steps towards satisfying our goal.

In the future I hope to write about additional changes, such as how firms deal with plans and stickers at the Registry Office, online submission of plan logs and the reduction of the SRD's carbon footprint.



# **Overhead Cost Considerations** continued from the President's Page

Does your proposal include recovering costs for the following?

- Resources and time invested to review the scope of work and "ensure that clients are aware of the complexity of the type of survey recommended and the nature of fees for service".
- Compliance with the Occupational Health and Safety Act.
- Development of a Safety Policy and Manual.
- Cost associated with training and duties of a Safety Representative.
- Due diligence related to continued documentation of Safety Meetings and procedures.
- Traffic Safety training & certification (this course is organized by some Regional Groups).
- Traffic Control Plan prepared along with the location and directions to the nearest hospital in case of an emergency.
- Provide Safety Manual & Equipment including signs, vests, safety glasses & cones, life jackets, survival suits and ongoing scheduled replacement.

- Safety Training and ongoing maintenance for tools used such as axes, hammers, chain saws, all terrain vehicles, boats and snowmobiles.
- Confined spaces safety training and certification for accessing sanitary & storm pipes.
- Dangerous Gas detection devices and training for their use when opening access lids.
- Compliance with federal regulations related to operating a vessel for the transport of workers and equipment over bodies of water.
- Workplace hazardous materials (WHMIS) training.
- First aid & CPR training and updates.
- First aid kits for all vehicles, boats, snowmobiles and the office.
- Special and site-specific safety training when working on pipelines and utility corridors.
- Special and site-specific safety training when working on 400 series highways, on railways, on or inside industrial sites, under any other site conditions such