

# CPA Common Final Examination

## BOARD OF EXAMINERS' REPORT

PART A — The Day 2 and Day 3 Report

September 2017 Examination



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## **THE BOARD OF EXAMINERS' REPORT ON THE COMMON FINAL EXAMINATION**

### **OBJECTIVES OF THE REPORT**

The objective of this report is to explain the Common Final Examination (CFE) process and to assist the profession in improving the performance of candidates on the CFE.

The report sets out the responsibilities of the Board of Examiners, the methods used for guide setting and marking the CFE, and the results of the marking process. The report also includes recommendations to candidates from the Board of Examiners.

The September 2017 CFE Report is presented in two parts: Part A is the Day 2 and Day 3 Report and Part B is the Day 1 report.

The appendices provide more detailed information on the design, guide setting, and marking of the CFE, as well as the board's expectations of candidates on the simulations. Readers are cautioned that the marking guides were developed for the entry-level candidate and that, therefore, all the complexities of a real-life situation may not be fully reflected in the content. The CFE report is not an authoritative source of GAAP.

### **RESPONSIBILITIES OF THE BOARD OF EXAMINERS**

The Board of Examiners (BOE or the board) comprises a chair, a vice-chair, and sixteen members appointed by the provincial bodies.

The board's responsibilities, as set out in its terms of reference, include the following:

- Setting the CFE in accordance with the *Chartered Professional Accountant Competency Map* (the *Map*) and other directions from the Professional Education Management Committee;
- Submitting the CFE and the marking guides to the provincial bodies for review;
- Marking the candidates' responses and recommending to the provincial bodies the pass or fail standing that should be given to each candidate; and
- Reporting annually on the CFE to various CPA committees and the provincial bodies, in such form and detail and at such time as is satisfactory to them.

The chair is responsible for the supervision of the evaluation process. The entire board is actively involved in the preparation of the CFE simulations, the preliminary marking guides, and the setting of the initial passing profile. A CFE subcommittee, made up of five members, participates in the Preliminary Evaluation Centre where the marking guides are tested against candidate responses and finalized. The chair and vice-chair participate in the start-up of the marking centre and provide oversight throughout the marking process. The full board is responsible for determining the passing standard.

## THE CFE

### Preparation and Structure of the CFE

The board staff works in conjunction with authors to ensure that simulations achieve the overall intent and design objectives of the board while adhering to the competencies and the proficiency levels specified in the *Map*.

The full board provides guidance as to the content and nature of simulations to be included on the examination. It also reviews and refines these simulations to make up the three-paper evaluation set.

### Nature of the Simulations

The CFE comprises a set of simulations that are both essential and effective in evaluating the candidates with regard to their readiness to be a CPA:

**Day 1** – The first paper is a four-hour examination consisting of a single simulation that is linked to the Capstone 1 group case. There are two versions of the linked cases. Version 1 is linked to the most current Capstone case, and is written by either first time writers, or by repeat writers who chose to attempt the new case rather than version 2 of the previous Capstone case. Version 2 is written by repeaters and candidates who deferred and are writing version 2 as their first attempt.

**Day 2** – The second paper is a five-hour case, with four different roles and requirements. Additional information tailored to each role is provided in four separate appendices.

**Day 3** – The third paper consists of three multi-competency area simulations.

### Assessment Opportunities

The board applies competency-based marking procedures that enable it to decide which candidates demonstrate readiness to enter the profession.

Assessment Opportunities are designed to answer the question, “What would a competent CPA do in these circumstances?” To attain a pass standing, candidates must address the issues in the simulations that are considered significant.

**Appendix A** contains a comprehensive description of the evaluation process.

### Marking Guides

Marking centre leaders and assistant leaders provide valuable input during the testing and setting of the marking guides, before live marking begins. The board chair, vice-chair, selected board member(s) and senior evaluations staff hold meetings with the leaders and their assistants during both the guide-setting and the marking processes. See **Appendix B** for the Day 1 simulations that appeared on the 2017 CFE and **Appendix C and D** for the Day 2 and Day 3 simulations and

marking guides. The marking results for Day 2 and Day 3, by Assessment Opportunity, appear in the statistical reports found in **Appendix E** of this report. See Part B of the CFE Report for details on Day 1, PRI version 1 and version 2.

**Day 1** – The marking guide is designed to assess the candidate on the stages of the CPA Way: 1) situational analysis; 2) analysis of the major issues; 3) conclusions and advice; and 4) communication. Based on these four summative assessments, the candidate's response is then holistically judged to be either a passing or a failing response.

**Day 2 and Day 3** – Marking guides are prepared for each simulation. Besides identifying the Assessment Opportunities, each marking guide includes carefully defined levels of performance to assist markers in evaluating a candidate's competence relative to the expectations set out by the board when developing the passing profile for a competent CPA.

Five categories of performance are given for each Assessment Opportunity. The candidate's performance must be ranked in one of the five categories:

- Not Addressed
- Nominal Competence
- Reaching Competence
- Competent
- Competent with Distinction

### **Setting the Passing Standard**

The board chair and vice-chair monitor live marking. Near the completion of the marking process, the CFE subcommittee satisfies itself that the markers applied the marking guides as intended by the board.

In determining which candidates pass the CFE, a passing profile is developed by the CFE subcommittee of the board. A candidate is judged in relation to these pre-established expectations of an entry-level chartered professional accountant. The passing profile decisions are ratified by the full board. In setting the passing profile, the board considers the following:

- The competency area requirements described in the *Map*
- The level of difficulty of each simulation
- The level of difficulty of each assessment opportunity
- The design and application of the marking guides
- Comments from leaders and assistant leaders regarding any marking difficulties encountered or any time constraints noted
- Possible ambiguity of wording or of translation
- Input on critical decision factors from an independent board of three CPAs who review the fair pass package

## The Decision Model

The purpose of the CFE is to assess whether candidates possess the competencies required of an entry-level CPA through a written evaluation that is common to all CPAs. Each day of the CFE is unique and is designed specifically to assess different skills:

- Day 1 is linked to the Capstone 1 group case work. It assesses the candidates' ability to demonstrate professional skills. It is independent from Day 2 and Day 3.
- Day 2 is the **depth** test. It assesses technical **depth** in one of four unique roles (that reflect the four CPA elective choices) and provides **depth** opportunities in the common core competency areas of Financial Reporting and/or Management Accounting. Candidates pre-select one role and respond from that role's perspective.
- Day 3 supplements the **depth** test in the common core areas of Financial Reporting and/or Management Accounting. It is also the **breadth** test for all common core competency areas.

Candidates must pass all three days in order to qualify for entry to the profession. Those seeking licensure must obtain depth in Financial Reporting and in the Assurance Role.

### Day 1

Day 1 is assessed independently from Day 2 and Day 3. A pass or fail decision is made based on a holistic assessment of the candidates' performance in applying the CPA Way to demonstrate essential professional skills.

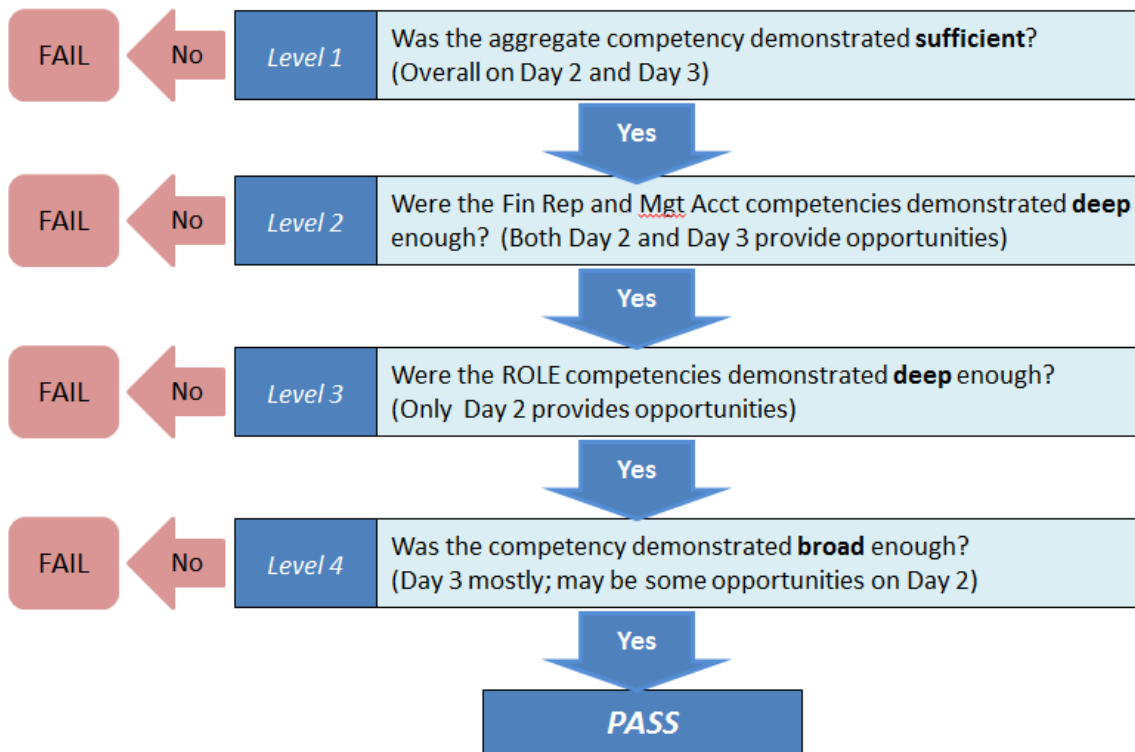
### Day 2 and Day 3

The decision model used by the board is presented in Exhibit I. Four key decision points, or levels, are applied in reaching a pass or fail decision, as follows:

1. The response must be **sufficient**; i.e., the candidate must demonstrate competence in the Assessment Opportunities presented on Day 2 and Day 3 (Level 1).
2. The response must demonstrate **depth** in the common core area of Financial Accounting or Management Accounting (Level 2).
3. The response must demonstrate **depth** in the pre-selected elective role (Level 3).
4. The response must demonstrate **breadth** across all competency areas of the *Map*, at a core level, by not having avoided a particular technical competency area (Level 4).



**EXHIBIT I**  
**DAY 2 AND 3 PASS/FAIL ASSESSMENT MODEL**



## **Approving the Results**

The CFE subcommittee reviews and approves the marking results for each simulation. Day 1 is assessed separately from Day 2 and Day 3.

**Day 1** – The CFE subcommittee discusses the profiles for both the marginally passing and marginally failing candidates to confirm that the board's pre-established passing profile has been appropriately applied by the markers.

**Day 2 and Day 3** – As part of the development process, the CFE subcommittee sets preliminary requirements for the three levels (tests of depth and breadth) being assessed on the Day 2 and Day 3 simulations. After the marking is completed, the board reviews and finalizes those requirements. The board establishes the Level 1 (sufficiency) requirement for the combined Day 2 and Day 3 simulations.

During the approval process, the board continues to consider whether the results could be affected by any inconsistency in the evaluation or the board's processes.

## **Reporting**

In reaching its decision, the board determines which candidates pass on a national basis only, without regard to provincial origin or language. Similarly, the detailed comments are based on analyses of the performance of all candidates.

The board reports the following information by candidate number:

- Overall pass/fail standing and pass/fail standing for each of Day 1 and of Day 2 and Day 3 combined.
- A pass/fail standing for Day 1.
- A pass/fail standing for Level 1, Sufficiency.
- A pass/fail standing for Level 2, Depth in Financial Reporting and/or Management Accounting.
- A pass/fail standing for Level 3, Depth in Role.
- A pass/fail standing for Level 4, Breadth in all technical competency areas.

## Thank You

All board members wish to express their warm and sincere appreciation for the outstanding energy, support, and commitment of the small group of Board of Examiners staff members whose dedication and talent contributed in large measure to the achievement of our objectives and the fulfilment of our responsibilities.

We also wish to acknowledge the contributions made by the provincial reviewers, markers, authors, translators, and editors. The commitment, energy, and skill demonstrated by all the markers were outstanding, resulting in the sound application of marking procedures and producing an appropriate evaluation of the candidates. Everyone's commitment to the quality and fairness of the process is appreciated.

A handwritten signature in cursive script that reads "Terry Booth".

Terry Booth, FCPA, FCA, CF  
Chair  
Board of Examiners

## A MESSAGE TO CANDIDATES

***To attain a pass standing, candidates needed to achieve a “Pass” on Day 1 and, on Day 2 and Day 3 combined, to demonstrate sufficient competence in all areas plus meet the two depth standards and the breadth standards.***

### INTRODUCTION

The September 2017 CFE Report presents detailed information on candidates' performance for all the examination cases, except for FVT, the Day 1 linked case, Version 1. Commentary on the performance of candidates on Day 1 (FVT Version 1) is provided in a summary format only in this message to candidates, since detailed commentary on FVT will only be provided after Version 2 is written in September 2018. The simulations, marking guides, marking results, and Board of Examiners' comments on Day 2 and 3 of the examination are found in this document (Part A of the CFE Report). Similar information on Day 1 (PRI version 1 and version 2) can be found in Part B of the CFE Report.

The intent of this message is to highlight common areas of deficiency and to offer advice from the BOE to help candidates understand how to improve their performance on the CFE.

### Nature of the CFE

The design of the CFE is such that each day of the examination allows candidates to demonstrate a different skill set. Day 1 allows candidates to demonstrate their high-level professional skills, such as critical analysis, decision-making, and professional judgment, as well as communication. Day 2 allows candidates to demonstrate their technical competence in the common Financial Reporting and, or Management Accounting competencies and in their chosen role, which ties to one of the four elective areas. Day 2 clearly directs candidates to the work to be done and is not designed to be time-constrained, allowing candidates to demonstrate depth. Day 3 allows candidates to demonstrate depth in the common Financial Reporting and Management Accounting competencies and provides multiple opportunities to demonstrate breadth in all the core technical competency areas. Day 3 is less directive and more integrative than Day 2. It is also time-constrained, requiring candidates to prioritize their time per issue.

### Specific Strengths and Weaknesses

#### Enabling – Professional Skepticism

For the first time this year, there was a common enabling AO on Day 2 (AO#7). Information was provided throughout the case that should have led candidates to question some of the actions of FRE's COO, Andy. Candidates were told that Andy maintains an active role on Halloran's board of directors, a company FRE has used for building several of its buildings. They were also told that a foundation crack in a property built by Halloran had resulted in FRE selling the property at a significant loss a few years ago. In addition, a large crack was recently found in the foundation of another building constructed by Halloran. Andy directed the VP Acquisitions, Construction & Maintenance not to investigate the crack. Candidates were expected to put together these case facts and explain the potential conflict of interest in Andy's different roles and the fact that he may not be acting in the best interests of FRE. While candidates were not explicitly directed to this assessment opportunity, the Board would have liked to see more candidates raise this issue.

The Board acknowledges that, because the issue was non-directed and required candidates to integrate case facts spread throughout Day 2, the issue was not easy. However, an important skill expected of a CPA is professional skepticism and being aware when information indicates that there may be an underlying problem. Therefore, despite the lack of direction, candidates should have recognized that Andy's behaviour was questionable and that it was their duty as a CPA to bring this issue to Gloria's attention.

### Communication

A majority of candidates communicated clearly and professionally. For the most part, candidates' responses were well organized, with a logical flow. However, the BOE still found that some responses were unclear, often due to the use of extreme point-form, which sometimes made it difficult to interpret the meaning and intention of what candidates had written. The BOE also noted there were candidates who merely repeated the case facts, with no further explanation as to why each fact was listed. This was typically done in point form. For example, on Day 2, Assurance role, candidates provided examples of case facts that affected the overall financial statement risk but did not explain why each fact increased or decreased the risk assessment. On Day 2, Performance Management role, many candidates listed case facts as either pros or cons without any further explanation. In addition, when discussing the board governance, candidates restated case facts but often did not explain whether each was a strength or weakness and why. On Day 2, Finance role, many candidates listed case facts as either a pro or con when analyzing the qualitative aspects of the townhouse project, without explaining why. On Day 3, Simulation 2, the Board saw a similar approach taken to the discussion of the e-book format versus the printed book. Some candidates simply listed case facts under either "pro" or "con" for each format, with no further explanation as to why each factor would be either an advantage or disadvantage of each option. Similarly, on Day 3, Simulation 3, some candidates listed case facts under each SWOT category without any further explanation.

Most candidates' quantitative analyses were well organized, with a logical flow. However, as was mentioned for the prior examinations, some candidates still did not explain the details of their calculations, making it hard to know what assumptions they used or how they arrived at their figures. For example, on Day 3, Simulation 2, candidates did not always explain why they were making normalizing adjustments to the earnings. Candidates' calculations were also lacking on Day 3, Simulation 1, where candidates provided a conclusion on whether or not the criteria for the grant claw-back were met without providing supporting calculations. Without seeing the underlying calculation, it was difficult to determine if the reasoning behind the comment made was valid.

Candidates are reminded that they need to clearly explain their train of thought to demonstrate competence. It is not sufficient to just state a correct conclusion. The Board is interested in understanding a candidate's logic and wants to see evidence of the analysis and professional judgment that has been applied.

### Time Management

An improvement in time management was noted on the September 2017 CFE, in particular with regards to Day 3. With a few exceptions described in this section, time was also well managed on the Day 1 and Day 2 simulations, which are not designed to be time-constrained.

Although neither of the Day 1 simulations on the September 2017 CFE were time-constrained in their design, some time management issues were still evident. Some candidates spent an inordinate amount of time preparing a full situational analysis, rather than simply addressing the changes that were relevant based on the case facts presented. Others spent too much time analyzing one of the issues presented, to the detriment of the others.

Some candidates in the Day 2 Taxation and the Day 2 Finance role spent too much time on the common management accounting AOs. In addition, a number of candidates chose to leave the more difficult taxation or finance requireds to the end. While candidates are free to address the requireds in the order they like, by focusing on easier issues or by spending too much time on the quantitative calculations, candidates run the risk of running out of time to address all of the requireds, as was seen frequently on both of these Day 2 roles.

Candidates are reminded that spending too much time on any one required can hurt performance on another required. Allocating sufficient time to cover all of the requireds, while still ranking the importance of the issues, is essential. Judgment is required in determining how much evidence to provide to demonstrate competence per AO. The BOE is looking for sufficient, but not excessive, depth to be demonstrated. Day 2 in particular is designed to allow time for filtering information and planning the response. Candidates are encouraged to use the time provided to plan sufficient time to address all the requireds.

The Board saw a marked improvement in candidates' time management on Day 3. There was much less evidence of candidates going over the suggested times on Simulation 1 and sometimes Simulation 2, to the detriment of their performance on Simulation 3. The Board was pleased to see candidates generally following the suggested times for each simulation on Day 3 to ensure they had the opportunity to answer all the requireds.

Despite an improvement from the prior year, there was still some evidence on Day 2 and Day 3 of candidates skipping issues (see the percentage of Not Addressed). For example, on Day 2, a greater number of candidates did not attempt to discuss the impairment issue at all. On Day 2, Finance role, some candidates skipped the most difficult required (AO#11 – tenant financing). Also, a greater number of candidates did not attempt AO#13 (Bates offer). This was not a difficult AO. It may be that candidates did not address the issue due to the time management issues discussed earlier. On Day 3, Simulation 1, a greater number of candidates did not address the clawback, procedures, and performance measures. Also, on Day 3, Simulation 3, more candidates avoided the responsibility centres and transfer pricing issue. All of these issues were directed to, but they were ones that candidates struggled with.

The Board is concerned that candidates may be intentionally not addressing the difficult issues in favour of the easier ones. The BOE reminds candidates that the CFE has not only depth and breadth tests, but also a sufficiency score. Skipping issues affects the sufficiency score. Candidates are encouraged to attempt all the requireds, managing their time carefully in doing so.

## Day 1

***Points have been excerpted from the September 2016 Board of Examiners' report on Day 1, Version 1 of PRI. Additional commentary based on candidates' performance on Version 2 has been added.***

### **Comments Specific to Day 1 (PRI Version 1) [excerpted from September 2016 CFE Report]**

The following paragraphs elaborate on the strengths noted and draw attention to the common weaknesses identified by the Board of Examiners on the September 2016 CFE, Day 1, Version 1 of PRI.

The PRI Day 1, Version 1 case presented less opportunity for financial assessments and calculations than previous cases (CHEI and RSI). It had more undirected issues, and candidates needed to be careful not to lose sight of the need to address not only the operational matters but also the high-level qualitative strategic analysis that was required for each major issue. Candidates struggled to identify the issue they were not directed to (governance and bonus). Candidates are reminded to step back and consider the broader problems, rather than taking an issue-by-issue, silo approach. It is important to integrate the case facts, particularly those important factors highlighted in the situational analysis, to identify the broader strategic issues.

Generally, candidates presented their responses in a well-structured format, beginning with the situational analysis and followed by an analysis of the issues they identified and a conclusion. The level of communication was generally good, with few exceptions.

All candidates started with a situational analysis. However, many simply restated case facts without putting those facts together to consider the implications to the situation presented. The BOE noted that many candidates appeared to go through a "checklist" that looked like a template approach, rather than logically addressing the matters that were relevant to the case being specifically presented. Candidates are reminded to think through the issues. There is no point presenting a situational analysis that is several pages long if that information is not going to be used as part of the analysis of the issues. Instead, the situational analysis should focus on the elements that have changed since Capstone 1 or those that will affect the decisions. These facts can then be linked to the later analysis.

**Comments Specific to Day 1 (PRI Version 2)**

Similar to Version 1, most candidates performed an appropriate situational analysis, identifying the important factors that had changed from the Capstone case or were new and relevant to PRI. Where many candidates fell short was in their failure to link their assessment of the situation within their analysis of the issues. For example, many candidates highlighted the mission and vision statements and PRI's values, but then failed to bring those elements into the discussion of which system is the better fit for PRI.

A number of candidates simply recapped the case facts, typically in extremely short bullet points, with no explanation as to why they were important enough to be listed. For example, candidates would simply state a case fact like, "Jeff wants to expand into the U.S.," but would not discuss the relevance of the point or use it in their analysis. As another example, candidates would identify the disagreement between Jeff and George in terms of future strategies but would not use that information in their analysis. This approach was not considered sufficient for a situational analysis.

At the other end of the spectrum were those candidates who went into too much depth in their situational analysis, redoing the entire analysis rather than focusing on the changes, which the case specifically directed them to do.

There were three major issues that candidates were expected to analyze from both an operational and a strategic perspective: the choice of e-commerce system, the shipping and distribution, and whether to increase real estate holdings. There were two additional issues that candidates could have discussed: the conflict between Jeff and George and the fact that, once again, Martina showed favoritism toward a family member in hiring. Some candidates chose to address the possible expansion to the U.S. as a separate issue. This was considered a valid discussion as well. Candidates were directed by the client to all the issues other than the governance issue. Candidates were expected to do both qualitative and quantitative analysis.

Most candidates identified the main issues and attempted a discussion of them. A surprising number of candidates failed to use the survey information that was provided in the case. This information could have been used in the analysis of the Alpha versus Express website decision or in the shipping and warehousing discussions. When the survey information was linked with the key success factors for the business, a supported recommendation was easily reached.

There was a lot of integration between the issues presented in the case. Better candidates saw the interrelationships and addressed them, whereas weak candidates tended to deal with each issue in a silo. For example, the shipping and warehousing issues and the real estate issues could all be linked and suggestions made to improve PRI's overall strategic position. The possible expansion into the United States could also play into several issues. Candidates are reminded to step back and consider the broader implications, rather than being too focused on an issue-by-issue, silo approach.



Unlike in past cases, most candidates performed calculations. However, the quality of their quantitative analysis was often poor. The calculations that were expected were minimal and quite straightforward, yet many candidates made mistakes like including the sunk costs in their system analysis or including a cost of shipping even though the heading was “100% billed to customers.”

Overall, strong candidates clearly understood that their role was to address Martina’s request to assess whether the company is moving in the right direction. They focused their analysis on the key risk areas to PRI from a strategic point of view, drawing in relevant case facts and elements of their situational analysis to present an overall conclusion on the direction PRI was heading and what should be done in the future to secure its position in the marketplace. Weak candidates did not provide an overall conclusion and sometimes failed to conclude on the individual issues.

Candidates are reminded that concluding on their position is important, particularly when lists of pros and cons are presented for each alternative. When there are multiple issues, some of which are recommended to be pursued and others not, summing up is necessary to convey which courses of actions should be pursued first and why. In this case, since the issues were highly integrative, an overall conclusion helped demonstrate the candidate’s strategic thinking.

Many candidates used short point-form lists of pros and cons with little explanation in their responses. This was considered poor communication because it led to responses that were confusing, difficult to follow, and in many cases challenging to understand.

### **Comments Specific to Day 1 (FVT Version 1)**

Most candidates dedicated the first section of their response to a situational analysis. Most used their situational analysis later in their response, making links back to the work they did while analyzing the specific issues. Most also used the information provided in the case (e.g., financial ratios and industry benchmark) to perform a general financial assessment of FVT. The most frequently used element of the situational analysis was the focus on new technology (e.g., the new mission and trends toward new technology). Some candidates calculated the covenant based on the internally prepared financial statements and recalculated it incorporating their recommendations for financing.

Weak candidates simply recapped case facts or went into too much depth in their situational analysis, redoing the entire analysis rather than focusing on the changes, which the case specifically directed them to do.

Candidates are reminded that the purpose of the situational analysis is to identify relevant changes in circumstances since the Capstone 1. It is not intended to be a full SWOT, nor is it intended to be a standalone analysis that is rewarded. Only when the information is integrated into the discussion of the specific issues is there value added.

There were five issues that candidates were expected to analyze both from a strategic perspective and an operational perspective. Four were investment opportunities that the candidates were specifically asked to analyze, and the fifth was an undirected requirement about the governance and ethical issues facing FVT. Candidates were expected to provide a qualitative and quantitative analysis for each of the four investment opportunities. Candidates were also expected to integrate the case information to recognize at least one of the ethics and governance issues and to recommend appropriate action.

Overall, most candidates provided a balanced response, with appropriate depth in the qualitative discussion on every issue, and they showed some numeracy skill in most of the major issues. Strong candidates tended to discuss the issues with the strategic implications at the forefront of their analysis. Weak candidates tended to list qualitative points that were mostly restated case facts, and they also tended to focus on the operational decision factors. Some weak candidates were not able to use the quantitative information in a useful way for FVT. Candidates are reminded that avoiding the numbers is a fatal flaw for the Day 1 case and are strongly advised to perform a balanced quantitative and qualitative analysis. Candidates are also reminded that it is important on Day 1 to discuss the strategic implications, not just identify the operational issues, keeping in mind that often the operational issues are presented in the case to raise broader strategic issues. Candidates are reminded to step back and think about the interrelationships between the issues. For example, candidates were expected to realize that FVT had financial constraints, such as the financial covenant and the limit on spending on investment (\$2.5 million), that they should have considered when assessing the investment options. Weak candidates did not understand the constraints that FVT was facing.

Candidates were not specifically directed to the ethical and governance issues but were given multiple examples in the case of these issues. Many candidates recognized the unethical actions of Zobair and realized that the FLIXREWARDS points should be remitted to the clients in order to maintain FVT's reputation. However, some did not see the issue at all, which was disconcerting to the Board. Candidates are expected to address ethical issues that could have an impact on the business, even though they are not directed directly to them. Candidates need to step back and integrate all the case facts to uncover those non-directed issues.

Candidates are expected to conclude on each analysis they complete, and their conclusions are expected to be consistent with the analysis they perform. There was no one correct solution to the FVT case. Strong candidates provided thorough conclusions for all the issues they analyzed. Most candidates took into account the constraints provided in the case by either comparing the investment needed for each project with the spending limit or attempting to recalculate the financial covenant based on the projects recommended.

Only a few candidates struggled with effective communication. The approach most candidates took was well structured and the language used was clear. However, the presentation of the exhibit in Excel by some candidates was hard to follow. The use of decision matrix and column format in Word (with pro/con listings) is also not an effective communication technique because it is difficult to clearly communicate the thought process in this format.

## **Additional Day 2 and Day 3 Comments**

The following paragraphs elaborate on the strengths noted and draw attention to the common detracting characteristics identified by the Board of Examiners on Day 2 and Day 3.

### Technical Knowledge

Most candidates were able to demonstrate the technical knowledge required throughout the CFE. In general, candidates performed well across most of the depth and breadth tests. The following are some examples of the technical weaknesses noted on the Day 2 and Day 3 simulations that contributed to the weaker results on those AOs.

Most candidates were able to provide a complete analysis of the basic accounting issues, but they struggled with the more difficult issues. On Day 2, Common AO#3 (BOT project), candidates did not always understand how to apply revenue recognition criteria to long-term contracts. Some candidates applied general revenue recognition criteria and concluded that, since performance of the contract had not been fully completed, no revenue could be recognized, without considering the fact that the *Handbook* guidance allows for the percentage-of-completion method to be used if certain criteria are met. Other candidates recognized that percentage-of-completion could be used to recognize revenue but demonstrated poor knowledge of how to apply the concept. On Day 2, Common AO#5 (impairment of buildings), many candidates struggled to explain the various steps required to assess the impairment of an asset. Candidates often confused the IFRS and ASPE *Handbook* guidance for impairment of assets and, as a result, provided incorrect discussions. For example, some suggested that the assets in question be written down to the higher of the asset's fair value less costs to sell or value-in-use (IFRS concepts), instead of considering ASPE's two-step approach of first determining whether the asset's carrying value exceeds its undiscounted future cash flows and, if so, then writing the carrying value down to the asset's fair value.

On Day 2, Assurance role, AO#8 (independence), many candidates struggled to apply the correct independence concepts, often applying concepts from CAS 200 that were not relevant, such as professional competence. Of those candidates who did discuss the correct concepts, many struggled to apply case facts to these concepts correctly. For example, many candidates concluded that there was a self-review threat, despite the fact that it is very unlikely the audit engagement would be relying on any of the work provided from the advisory engagements.

On Day 2, Performance Management role, AO#13 (mission), candidates struggled to provide a revised mission statement. Many candidates recommended surface-level improvements, such as adding the words "young individuals and families" or "Prince Joel and Bluebell" to the existing mission because a mission should include the "who" and "where." While those were valid points, they were the easiest ones to raise. Candidates should have also discussed the broader issues, like the macroeconomic factors facing FRE. Also, the reasons that Gloria created FRE and her desire to obtain more funds to provide more affordable housing could have been considered.

On Day 2, Taxation role, candidates were able to discuss the simpler issues with sufficient technical proficiency but struggled with more difficult concepts. For example, candidates had difficulty with the nature of de facto control (AO#9), where they often failed to recognize that de jure control was not the only form of control to be considered. They also struggled to identify the tax implications of a donation of private company shares to charity (AO#11), instead either treating them the same as public company shares or failing to use fair value for the resulting transactions. Finally, in candidates' discussions of the process for correcting prior year errors (AO#13), they consistently applied incorrect statute-barred dates or suggested that it was not possible to correct such errors.

Candidates struggled the most on Day 3 in Assurance and Finance. Candidates struggled with the review engagement context they were put in on Day 3, Simulation 1, AO#5 (review procedures), where they were asked to provide specific review procedures. Some candidates seemed to understand that review engagements focused on discussion, inquiry, and analytical procedures; however, they did not seem to know how to translate this into actual procedures.

Candidates also struggled on the Finance AOs on Day 3. On Day 3, Simulation 2, AO#3 (business valuation), candidates struggled to calculate EBITDA. Most candidates were not able to make a sufficient number of normalizing adjustments to earnings to be able to calculate EBITDA, which is a basic finance concept. Candidates also had difficulties with Day 3, Simulation 3, AO#5 (new equipment), where the majority of them were not able to differentiate between the go/no-go decision and the financing decision. Most candidates treated the two decisions at the same time and provided a calculation for each of the financing options, which resulted in calculations that were not comparable to each other. For example, candidates included the annual incremental net cash inflows in some of the options, but not all. The maintenance and repair costs were also included in the lease amount, but not in the other options, which some candidates ignored. This reduced the usefulness of their recommendation to the client.

Finally, candidates demonstrated a lack of knowledge on Day 3, Simulation 3, AO#3 (responsibility centres and transfer pricing). Many candidates were able to list the possible types of responsibility centres and explain what each type was about, as well as list the different types of transfer pricing that could be used. However, they had great difficulty when it came to the application of the theory to the scenario presented. Many candidates stated what the current situation was but then struggled to explain why they thought the responsibility centres or the transfer pricing policy were adequate (or not). Many candidates stopped short of providing an explanation, while others recommended policies that were not appropriate, such as recommending that the manufacturing division should be a profit centre in order to show a profit and improve the overall company's profitability. Candidates seemed to have enough technical knowledge to state what the theoretical options were, but not enough to apply the options to the client's situation and resolve the issues at stake.

Candidates are reminded that the CFE requires a strong foundation of technical knowledge in order for candidates to clearly demonstrate their professional skills, apply their judgment, and thereby demonstrate competence.

### Lack of Support/Generic Discussions

A common theme across all the days was the fact that some candidates presented case facts without elaborating on why a fact was relevant to the discussion or position being argued. Also, some candidates made generic comments or drew conclusions without integrating the case facts into their analysis, making for a superficial analysis of the issues. The following are examples drawn from the BOE's commentary on the Day 2 and Day 3 simulations.

On Day 2, Assurance, AO#14 (special reports), candidates were able to provide several relevant reports that would meet the requirements of the Ministry. However, candidates typically discussed these options in a very generic manner, often without discussing why each report would be relevant in FRE's particular circumstances and would meet the users' needs.

On Day 2, Finance, AO#12 (financial position and return), some candidates performed a very generic ratio analysis, with explanations of the trends that were not tailored at all to FRE's rental property context. For example, some candidates referred to "sales" and "receivables" or "inventory," all concepts that do not really fully apply in a real estate context.

On Day 2, Performance Management, AO#14 (reports), many candidates just provided a theoretical discussion of financial statements without relating it back to FRE. For example, candidates would recommend a statement of cash flows and then discuss how it can tell a company how much cash they have to work with. However, there were specific case facts that supported why a cash flow statement would be useful for FRE, such as the fact that FRE's current ratio was below 1.0 and that FRE operates with a very low profit margin, meaning that it is important for the board to know FRE's cash position at all times.

Candidates struggled on the Assurance AOs on Day 3. Lack of support and generic discussions were seen. Candidates struggled to provide procedures that were relevant to the scenario presented, many providing very generic procedures that would apply to any engagement. On Day 3, Simulation 1, AO#4 (review planning memo), candidates had difficulty using case facts to describe the significant aspects of the business and areas to focus on. For example, some candidates suggested determining whether the accounting policies in place were appropriate or inquiring about unusual transactions, et cetera, without providing any procedures linked to the actual sources of revenue or expenses incurred by ECCS. Candidates' descriptions of the procedures were also vague, with many using wording such as "we should verify" or "we need to ensure." This also happened on Day 3, Simulation 2, AO#5 (CRA procedures), where candidates were asked to provide examples of procedures the CRA would be performing during the agency's review of Roxanne's 2015 income tax return. Many candidates told Roxanne to make sure she kept her receipts, without providing examples of actual procedures the CRA would be performing.

Candidates must ensure that they answer the questions "Why?" or "So what?" when they make any point using case facts. Candidates are reminded that all competent candidate profiles on the CFE require supported arguments and defensible positions that are case specific.

### Irrelevant Discussions

The BOE noted that this issue was far less of a concern than on previous examinations. However, there were still a few incidents of candidates providing irrelevant discussions.

On Day 2, Common, some candidates discussed the BOT project as a government grant and tried to apply contingent gain criteria to the property tax assessment appeal, the operating portion of the BOT project, or the RTO forfeited credits. The application of these specific *Handbook* sections to the topics listed were not relevant and demonstrated an overall lack of understanding of the scenario presented.

Some Day 2, Performance Management role candidates spent time unnecessarily doing a situational analysis, which was simply a restatement of case facts and was not required of their role. Perhaps they were using last year's exam as a template, since a situational analysis was requested on last year's Day 2 Performance Management role.

On Day 3, Simulation 1, AO#7 (performance measures), some candidates misunderstood their role and, instead of providing measures to assess whether ECCS was meeting its mission, provided advice on how ECCS could achieve its mission. For example, instead of providing a way to measure the clients' satisfaction, some candidates suggested ways for ECCS to improve clients' satisfaction.

Candidates are reminded to use their judgment in deciding whether a discussion is pertinent to the issues at hand or the role. Where there are few case facts to work with, candidates should stop and question themselves about the appropriateness of the discussion. They should ask, "Is this helpful and relevant to the client/user of the report? Why?" Only if they can answer "yes" to these questions should they proceed with the discussion.

### Contradicting Case Facts

The 2017 CFE saw an increase in the proportion of candidates directly contradicting case facts presented to them, even when the facts were presented by authoritative sources in the simulation.

For example, on Day 2, Common, AO#6 (lawsuit), some candidates ignored the case facts presented that stated the lawyer could not comment on the likely outcome of the lawsuit due to a lack of available information, and instead concluded that it was likely a future event would confirm that an asset had been impaired or a liability incurred at the date, which is in direct contradiction of what the case suggested.

On Day 2, Assurance, AO#8 (independence), many candidates explicitly ignored the partner's direction that the consulting engagements could be performed and concluded that the audit firm should withdraw from the consulting engagements.

On Day 2, Taxation role, candidates were explicitly told by the partner at FRE's CPA firm that the property would not qualify as a replacement property because it is rental property. Despite this, a significant number of candidates chose to analyze the replacement property rules.

In addition, on Day 2, Taxation, Finance, and Performance Management roles, candidates were told that FRE has accounted for the RTO program properly for external reporting purposes. Despite this, some candidates in these roles chose to analyze the financial reporting aspects of the RTO program.

On Day 3, Simulation 3, AO#5 (new equipment), some candidates incorporated taxes in their calculations, despite the fact that the required specifically said to ignore tax implications. The required also said to ignore any financial reporting implications for now, but some candidates still addressed the accounting treatment of the purchase of the new equipment by discussing whether the leasing option would result in a capital lease or an operational lease.

Candidates are reminded that, while they should remain skeptical of unreliable sources, they should not be suspicious of all the information presented to them. Candidates are expected to apply their judgment to determine what information can be relied upon and what information should be treated with skepticism.

## **APPENDIX A**

### **EXAMINATION DESIGN, MARKING GUIDE DEVELOPMENT, AND MARKING OF THE COMMON FINAL EXAMINATION**



## CFE Design

Day 1 is one four-hour case that is linked to the Capstone 1 case, which candidates work on in groups for eight weeks prior to the CFE. When writing the Day 1 case, candidates are allowed access to their Capstone 1 case but not their group's answer or any sample response. The Day 1 case is designed to assess the enabling (professional) skills. Candidates are directed to *not* perform any detailed technical analysis, but rather to target a "board room and senior management" level of discussion, with high-level analytics. There are two versions of the Day 1 case. Candidates preselect the version they will write.

Day 2 is one four-hour case on which candidates are given five hours to respond. The extra hour gives candidates time to filter and find the information that they need to answer *their* role requirements from within the common information presented. Day 2 is designed to assess the technical competencies in **depth** (Level 2 and Level 3). Candidates pre-select a role (Assurance, Finance, Taxation, or Performance Management). All candidates work with the same case — it has a common section and four sets of appendices containing additional information applicable to each of the four unique roles. The required tasks, regardless of the role, are clearly directed unless there is an undirected/enabling issue in the case that the board expects candidates to identify on their own. Day 2 evaluates the competencies listed in the *CPA Competency Map* mostly in the elective area and in common Financial Reporting and/or Management Accounting areas in **depth**. The role **depth** test (Level 2) may also include coverage of other competency areas from the common core.

Day 3 is a four-hour examination containing a mix of small cases (60 to 90 minutes each) that evaluate the common core competencies only. The Day 3 cases provide additional opportunities for **depth** in Financial Reporting and Management Accounting and all the **breadth** opportunities for all the technical competency areas. Cases are time constrained, and they are designed to cover different competency areas within each case. A higher level of integration and judgment is required on Day 3 of the CFE than in the core modules, although the technical competencies are tested at the common core level of expectation.

The assessment opportunities on the Day 2 case are given mark values such that each of Day 2 and Day 3 are weighted equally.

## The Development of Marking Guides and the Provincial Review Centre

Approximately three months prior to the Common Final Examination booklets being published, provincial reviewers meet to examine the simulations and the preliminary marking guides. The provincial reviewers' comments are then considered by the board when it finalizes the examination set and again when the senior markers review the marking guides in the context of actual responses.

## **The September 2017 CFE Marking Centre**

From the marker applications received, approximately 225 individuals were chosen to participate in the September 2017 CFE marking centre. The criteria for selection included marking experience, motivation, academic achievement, work experience, personal references, and regional representation. The marking was supervised by the CPA Canada Evaluations and International Assessment full-time board staff (8 staff).

The Day 1 FVT Version 1 linked case was marked by a team of 33 markers in Montreal from October 13 to October 28, 2017. The Day 1 PRI Version 2 linked case was marked remotely by a team of four markers from October 13 to October 28<sup>th</sup>.

Day 2 Assurance was marked by a team of 71 markers in Montreal from October 7 to October 20, 2017. Day 2 Performance Management was marked by a team of 18 markers from October 7 to October 21, 2017. The other two Day 2 roles (Taxation and Finance) were marked by 12 markers in Toronto over a 7-day period in early October, immediately following the preliminary evaluation centre.

Two of the three Day 3 cases were marked in Montreal from October 13 to October 28, 2017. The third case was marked remotely over the same time frame. The Day 3 simulations had a total of 89 markers.

Before the marking centre, some board members, leaders, and assistant leaders attended a five-day preliminary evaluation centre (PEC). Participants reviewed the marking guides, applied them to randomly selected candidate responses, and made necessary revisions to the marking guidelines. The written comments on the marking guides received from provincial reviewers were carefully considered.

At the beginning of the marking centre, the leaders and assistant leaders presented the marking guides to their teams. The teams undertook a two-phase test-marking procedure prior to actual marking. Phase one consisted of marking guide familiarization, during which markers applied the marking guide to copies of candidates' responses and collectively reviewed their results. Phase one thus ensured that all markers understood the issues in the marking guide and the basis on which to apply each expectation level. Phase two was an expanded test marking of several responses to establish marker congruence.

After the training and test-marking phases, and only when marker congruence was achieved, live marking commenced. All teams, for all days, had a leader, and anywhere from two to seven assistant leaders, and both French-speaking and English-speaking markers. Each team had one or more markers who were capable of marking in both languages.

The board strives for the highest possible marking consistency and quality control. Leaders and assistant leaders, therefore, devoted much of their time to cross-marking and other monitoring activities. Markers' statistics were reviewed to ensure that marking remained consistent throughout the centre. Based on analysis of the statistics, leaders reviewed and, if necessary, re-marked papers to ensure that the assessment opportunities were marked fairly for all candidates. Bilingual markers marked papers in both languages, and their results were compared to ensure that the marking was consistent in both languages.

### **Borderline Marking (Day 1, Version 1 and Version 2)**

Each candidate's paper was marked once. All candidates' responses that were assessed as clear fail, marginal fail, and marginal pass were marked a second time by the team leader or assistant team leader. Clear pass results were also audited on a random basis to ensure accuracy of marking.

### **Double Marking (Day 2)**

Each candidate's paper was marked independently by two different markers. If the two initial markings differed on any assessment opportunity, an arbitrator (the leader, the assistant leader, or a senior marker) compared the two initial markings and determined the final result.

As an added measure to ensure that markers were consistently applying the marking guide, a two-day rule exists that results in the second round of marking not beginning until two days have elapsed since the first marking. Adherence to this rule ensures that any movement in the application of the guides due to marker interpretations during the first two days of live marking are stabilized before the second marking and arbitration procedures begin.

### **Borderline Marking (Day 3)**

Unlike Day 2, Day 3 was marked using a borderline model. This is the first time a borderline process was applied to Day 3 of the CFE. All Day 3 responses were marked once and then the Day 2 and Day 3 results were combined and all failing candidates who passed the Day 2 role test, had their Day 3 response marked a second time by an independent marker and any differences between the first and second markings were arbitrated by a leader or senior marker.

### **Subsequent Appeal of Results and Request for Performance Analysis**

Failing candidates may apply for an appeal of their examination results and/or a performance analysis for either Day 1, Day 2 and Day 3, or for all three days.

#### *Appeal Approach*

Great care is exercised in the original marking and tabulating of the papers and results. The following appeal procedures are applied to all three papers constituting the Common Final Examination.

Under the supervision of the chair of the Board of Examiners, as well as CPA Canada Evaluations and International Assessment staff, the responses are reviewed by the leaders and assistant leaders who did the original marking. The leaders and assistant leaders read the responses and compare them to the marking guides used at the marking centre. In reviewing candidates' results, two aspects are considered. First, it must be determined that the basis of marking the papers has been consistent with that accorded other candidates who wrote the examination. Second, all responses reviewed are subjected to a careful check to ensure the markers have indicated that consideration has been given to all material submitted by the candidate.

The results are then tabulated and the decision made regarding whether any candidates have been treated unfairly and should be granted a pass on the examination.

The appeal results are then forwarded to the provincial bodies for notification of the candidates.

**APPENDIX B**

**SEPTEMBER 13, 2017 – DAY 1 SIMULATIONS**

***See Part B of CFE report for the marking guides for PRI version 1 and version 2. (The marking guide for the FVT Version 1 simulation will not be disclosed until version 2 of the case is written, which will be in September 2018.)***

**COMMON FINAL EXAMINATION  
SEPTEMBER 13, 2017 – Day 1**

**Case (FVT-Version 1)**

**(Suggested time: 240 minutes)**

It is May 5, 2020, and Chris Renker, your boss at Renker and Curtis Co Management Consultants (RCC) tells you that you will be working with the original consulting team on another consulting engagement with First View Theatres Inc. (FVT).

Chris recently met with Stephanie, Viktor, and Lanny Lightfoot and Zobair Terdel to discuss the events that occurred between 2017 and 2020 (Appendix I). Industry growth rates for regular box office revenue have been nil and are predicted to decline as entertainment substitutes gain popularity. Many smaller companies have been forced out of the industry, and the larger nationwide companies have gained more negotiation power with film distributors. This change has increased film costs and decreased margins for FVT's film exhibition business.

During 2017, FVT invested in the Premium Plus Viewing (PPV) technology in two auditoriums in London and two auditoriums in Leamington. Due to these successful investments, FVT has remained profitable, despite the increased film costs. The proposed investments in CLR, the Quebec-based company, and The Games Place were not pursued. The sale leaseback of the head office building was not pursued either.

Updated statistics on 2019 attendance numbers by theatre locations and industry benchmarks are in Appendix II and III. Financial statements for the year ended 2019 are included in Appendix IV.

To better compete for qualified staff, FVT increased its hourly part-time rate and changed some part-time positions to full-time. Interest rates have increased, and the Canadian dollar is expected to remain stable against the U.S. dollar. Consumers appear willing to spend more of their discretionary income than in the recent past.

Changes, including luxury seating and service, along with four-dimensional (4D) technology, have made film watching very different from home viewing. As attendees are willing to pay a premium for enhanced viewing experiences, an increasing number of theatres are upgrading their technology. The latest technology is virtual reality (VR). Although no feature-length VR movies have yet been released, industry experts believe the technology will be perfected within the next two years.

Change is so rapid that it is increasingly expensive to stay informed of, and implement, the changes. Some of FVT's competitors have gained significant financial benefit by investing in new technology at the developmental stage, resulting in lower implementation costs and increased profits on sale of the technology to competitors.

At FVT's most recent board meeting, the mission and vision statements were changed, after much heated discussion, with Stephanie being the only dissenting shareholder. The company is still committed to providing a premier entertainment experience. However, the board supported more aggressive investment in new technology.

Vision statement: *Our vision is to be at the forefront of providing premier and, state-of-the-art entertainment to our guests.*

Mission statement: *Our mission is to provide a premier and state-of-the-art entertainment experience tailored to the local community. We accomplish this by investing in leading-edge film projection technology in order to be the first company to implement this technology for our customers' viewing experience. We also strive to train employees to be respectful, attentive, and friendly, select films that best appeal to the local community, ensure clean and safe venues for employees and attendees, and support entertainment and arts in the local community.*

The board also modified some of FVT's objectives. The board wants to ensure that operating cash flow and net income increase by at least 5% in 2020. In addition, shareholders want to improve FVT's solvency ratios by continuing to pay off the term loan, and they want to reach a return on equity of 10% by 2021. FVT is less focused on revenue per attendee and more focused on growing profits.

FVT needs to make some decisions quickly. Chris assigns you the following tasks: "Please prepare a report for the board of FVT. Taking into account what you learned about FVT in the previous engagement, please recap the important decision factors for FVT's board to consider, focusing on significant changes from our previous situational analysis that will impact FVT. Further, provide your assessment of the major issues currently facing FVT. For each of the major issues, identify for the board any significant considerations they may not have taken into account and any additional information they must obtain before making their decisions. FVT's board wants us to focus on the strategic decisions but to also address any operational issues that need to be considered first. Finally, where there is sufficient information, you are to suggest a course of action."

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**APPENDIX I**  
**BOARD MEETING WITH CHRIS RENKER IN ATTENDANCE**

Stephanie: Thank you, Chris, for attending our special board meeting. For your information, since our last engagement, the management positions have not changed. The board has decided to limit FVT's total spending on investments at this time to \$2.5 million.

Here is a summary of major events since the last engagement.

2017	May 16	FVT sold its head office land and building, but there was no leaseback. Consequently, FVT moved its head office to a new location and entered into a 10-year operating lease.
2017	June 1	FVT invested \$0.5 million in Connery's Bar and Grill (CBG) for a 75% ownership in the joint arrangement.
2018	January 1	Stephanie invested \$3 million for 5,000 common shares of FVT.
2018	February 17	Cost-cutting measures were implemented at the Sarnia locations, and the number of auditoriums showing films at Sarnia #1 was reduced to six.
2018	August 27	Suisui Yang left and was replaced by Caterina Lavine.
2018	October 15	FVT implemented the FLIXREWARDS program.
2018	December 31	The remaining preferred shares were redeemed. Kent and Sheila Lightfoot officially retired from FVT and FLL and are no longer involved in either business.
2019	February 19	FVT invested another \$0.5 million in CBG for a second location in London. Fred invested a proportionate amount; FVT's ownership remained at 75%.
2019	April 22	The bank approved a new line of credit, to a maximum amount of \$5 million, which expires in 2025. It has the same covenant as the bank loan and is secured by selected equipment and the personal guarantees of Viktor, Lanny, and Stephanie Lightfoot. The interest rate is prime plus 1% (prime is currently 2.8%).
2020	January 1	Zobair Terdel was given the opportunity to buy into FVT and invested \$0.6 million for 1,000 common shares.

**APPENDIX I (continued)**  
**BOARD MEETING WITH CHRIS RENKER IN ATTENDANCE**

- Viktor: I believe that VR technology is the next big step. Virtual Reality Tech Inc. (VRT) is a private Canadian company that currently uses this technology to produce five-to-ten-minute promotional videos. Yuxuan Zhang, the owner of VRT, asked me if FVT would consider investing to further develop this leading-edge technology. Yuxuan conducts research and development in the use of VR technology for producing and viewing feature films. Yuxuan has been unable to raise funds through traditional sources and has had limited success raising funds through crowd sourcing. I am surprised, as I think this capability will be another “landmark” in film technology. Investing in VRT would help us diversify.
- Stephanie: I am concerned that we will be asked to make more than one cash investment before a product is available for commercialization. R&D is expensive. This direction is very different from the vision of our parents, who would want us to upgrade our theatres.
- Lanny: We cannot live in the past. Viktor is the only one of us who understands new technologies and who has experience in this area. If Viktor believes our future profits will benefit from this investment, I am supportive of investing. Viktor, what kind of return do you think we might see from this investment?
- Viktor: Due to its unique nature, we will want an annualized return of 30%. We would get this return by selling this investment to a major strategic buyer in five years. I have had the accounting department prepare some preliminary numbers (Appendix V).
- Lanny: As there is little growth potential, we have to move away from our heavy reliance on general box office admission fees. But I still need to better understand how we will make a return from this investment. It looks like we would recognize this investment at cost and would receive no income, and the only return will be on the eventual sale to a strategic investor.
- Chris: Do any of you know anything about Yuxuan’s past successes?
- Zobair: Yuxuan has both technical expertise and the experience of bringing two other technological advances to market. I am confident that, with Yuxuan’s involvement, this investment could be the first step in gaining experience in investing in the earlier stage of new technology development. I really like the idea of working with an experienced partner. I also see it as a way to diversify our income streams.

**APPENDIX I (continued)**  
**BOARD MEETING WITH CHRIS RENKER IN ATTENDANCE**

Stephanie: Chris, we need an assessment of this investment opportunity. What is up next for discussion?

Zobair: The Sarnia locations continue to underperform. As you know, we closed six of the twelve auditoriums in the Sarnia #1 location during 2018, and we cut costs by reducing staff and limiting the hours of operation at both Sarnia locations. As we still have a loyal, although shrinking, customer base, I vote to keep these locations open. My research on the Sarnia competitor that is taking away our customers indicates that they are charging the same admission price as us. In addition, if we want to keep our staff, we probably have to further increase our wages as other companies are offering higher hourly rates to attract part-time staff.

Viktor: Both Sarnia locations were last upgraded nine years ago. This is most likely the cause of the attendance decline. For the same admission price, the competitor offers newer projection technology and an ambience far superior to FVT's. It would cost us at least \$2 million to upgrade the two theatres, and I am not sure this is the wisest use of our cash.

Stephanie: If we close these locations, it will look like we have abandoned our customers. Kent and Sheila would be completely against closures. FVT has always been about the community, and closures, or even lowering our admission prices, could have a detrimental impact on FVT's reputation. If customers outside Sarnia hear of this, it could negatively impact our other locations. I also do not want to lay off staff, some of whom have been with us for a long time.

Lanny: With the loss of both Sheila and Suisui, FVT has lost many of its film distribution contacts, and we are now having difficulty negotiating favourable film costs. I think we should close the theatres. Realistically, we have already made as many cost cuts as possible. Attendance numbers are falling, and the losses from both Sarnia locations have been hurting FVT for years now. Keeping Sarnia open will only continue to negatively affect us.

Zobair: I asked the accounting department to look at different options (Appendix VI).

Stephanie: I think we need to better understand the impact. Let's get Chris to look at it.

Let's discuss CBG. Fred has recently developed serious health issues and needs to sell. As Fred is the head chef and manages both restaurants, we have had little involvement with the daily operations and have relied heavily on Fred. In fact, Fred only sought our input when he wanted to invest in another location. We received an offer from George McCain yesterday to purchase all outstanding shares of CBG – both Fred's and FVT's.

**APPENDIX I (continued)**  
**BOARD MEETING WITH CHRIS RENKER IN ATTENDANCE**

- Zobair: A few weeks ago, I personally offered Fred \$700,000 for his shares. As you know, my wife is a chef who wants to open her own restaurant, and we both thought this might be great for her. Fred has not yet gotten back to me but is considering my offer.
- Stephanie: I am surprised! Why didn't you tell us?
- Zobair: When I learned that McCain was considering making an offer, I needed to act quickly, for my wife's sake.
- Lanny: Zobair, I cannot believe that you did not let us know right away that McCain was considering making an offer, and that you acted on this information by making your own offer!
- Zobair: The restaurant has proven to be very profitable and I did not want McCain to get it. I think CBG will continue to be successful, which is why I want to invest. I just assumed FVT would not be interested in buying out Fred.
- Stephanie: Well, we now need to consider what to do. We could sell out entirely to McCain, or hope that Fred accepts Zobair's offer and continue in a JV arrangement with Zobair as our new partner. Or, maybe FVT should buy out Fred?
- Lanny: I believe that CBG will continue to be successful. The JV arrangement outlines how a buyout price would be determined. We need an idea of the value of CBG in order to make a decision. I do not think there has been any change in the rate of return of 17% in the restaurant business since 2017.
- Viktor: I think we should sell CBG to McCain and invest the proceeds in technology. With Fred no longer involved, the restaurant may not continue to be as successful. I think it is far too risky to go forward with a new chef and managers in the highly competitive restaurant business.
- Stephanie: But, due to the crossover benefits of discounts for movie goers and diners, the investment in CBG has helped to increase revenues at the London theatre locations. CBG also prepares our light lunches for our PPV experience and charges FVT cost, without any markup. CBG's cost is substantially lower than we would normally have to pay, which has helped reduce our overall costs, and the revenue value of those light lunches is three times what was originally estimated.

**APPENDIX I (continued)**  
**BOARD MEETING WITH CHRIS RENKER IN ATTENDANCE**

- Zobair: If my wife takes over as chef, FVT won't have to worry about who will make the day-to-day decisions. Fred and I started looking for a location in Tillsonburg (near London) for a third restaurant to open in 2021, and I want to continue pursuing this expansion. However, since Fred was completely dedicated to CBG, it will require a chef and two managers to replace him, just to run the existing restaurants, at an annual total cost of \$350,000.
- Stephanie: Chris, here are excerpts from the proposed purchase offer from McCain, and a copy of the JV arrangement (Appendix VII). Can you give us the value of CBG?
- Chris: Anything else?
- Viktor: I want to continue our PPV upgrades in one auditorium in each of three more locations – Tillsonburg, St. Thomas, and Chatham. We already know they have been successful at the other locations, and our St. Thomas and Chatham customers are asking for these improvements. The accounting department says the capital budget would be similar to the one in 2017, which was \$2 million for each location. This project has a positive NPV. We expect annual operating cash flows before tax to increase by \$1.15 million in total. I would like to start these upgrades immediately.
- Zobair: Good idea. I am confident these new investment projects will proceed more quickly, with less revenue lost due to the closures during renovations.
- Lanny: Where is all this cash coming from? We have to place orders for the equipment, screens, and seats very soon. I think we can better use this money on some of the other investments we have discussed and put off the upgrades until we have at least \$6 million built up in the bank.
- Viktor: Why can't we borrow on our new line of credit? The return on this project will be far greater than the interest we have to pay on the loan. Also, equipment costs are going up. In January 2021, a totally new and advanced system is expected to be launched. The supplier is predicting that prices will increase by 8%. They are selling off their current equipment at reduced prices, which is great for us. That is why we want to upgrade all three locations now and not wait.
- Stephanie: I have a bigger concern. How will closing Sarnia look to the Sarnia customers and employees? People will wonder why we made major upgrades in some locations, but not in Sarnia. This might have a negative impact on FVT's reputation and employee morale.

**APPENDIX I (continued)**  
**BOARD MEETING WITH CHRIS RENKER IN ATTENDANCE**

- Lanny: Chris, what do you think about this potential investment? Could you also suggest how the company could finance the upgrades?
- Stephanie: Our last issue is the customer loyalty program. In October 2018, we implemented our FLIXREWARDS program. We now have a strong web presence, and more customers signed up than originally projected. In June 2019, we made a program change, and last week we discovered that, since then, our customers have been earning one-tenth the number of points they should have been. Our IT department has fixed the program error, but we have not yet adjusted the accumulated points balances. The number of accumulated points in the customer accounts is not right. IT staff are asking what we want them to do.
- Zobair: We have fixed it going forward and we have had no complaints from customers. The total amount is likely not material to FVT's financials. Why tell them or adjust?
- Viktor: We owe those points to our customers, and we probably owe FLIXREWARDS something too. We can't just ignore that.
- Zobair: FLIXREWARDS provides us with reports each month. I am surprised that they did not notice that reward points numbers dropped dramatically after June. Maybe we should get FLIXREWARDS to pay us what we owe our customers. We could argue that FLIXREWARDS missed this change and should have been monitoring it.
- Stephanie: It is time to wrap up this meeting. Chris, can you identify what we need to consider based on what you learned at this meeting?

**APPENDIX II  
THEATRE STATISTICS**

*For the year ended December 31, 2019*

**1. Statistics for 2019**

	Number of auditoriums	With digital 3D screens	PPV auditoriums	Attendance, excluding PPV	PPV attendance	Total attendance
London #1	12	6	2	518,935	105,060	623,995
London #2	9	3		456,300		456,300
London #3	12	5		472,500		472,500
London #4	7	4		295,800		295,800
Sarnia #1	6	5		254,250		254,250
Sarnia #2	6	4		215,780		215,780
Chatham	9	4		442,130		442,130
Leamington	10	6	2	406,649	87,140	493,789
St. Thomas	12	5		481,900		481,900
Tillsonburg	9	4		346,980		346,980
Woodstock	8	4		425,110		425,110
Total	100	50	4	4,316,334	192,200	4,508,534

**2. Average revenues per attendee**

	2019
Average box office revenue – regular	\$ 8.75
Average box office revenue – PPV	\$19.70

**APPENDIX III  
INDUSTRY BENCHMARKS**

	<b>2016 Benchmark</b>	<b>2019 Benchmark</b>	<b>2016 Actual</b>	<b>2019 Actual</b>
<b>Ratios</b>				
Box office revenue per attendee	\$9.10	unchanged	\$8.67	\$9.22
Concession revenue per attendee	\$5.25	unchanged	\$4.95	\$5.25
Box office revenue per theatre (in thousands of dollars)	\$3,948	unchanged	\$3,732	\$3,778
<i>Liquidity</i>				
Current ratio	0.67	unchanged	0.30	0.49
Quick ratio	0.64	unchanged	0.22	0.39
<i>Solvency ratios</i>				
Long-term debt to equity	0.47	unchanged	1.39	0.47
Total debt to equity	1.20	unchanged	1.69	0.64
Total debt to assets	0.54	unchanged	0.63	0.39
<i>Activity ratios</i>				
Days in concession inventory	21	unchanged	23	21
Days in film costs payable	35	unchanged	33	35
<i>Profitability</i>				
Film costs to box office revenue	52%	unchanged	58.8%	57%
Concession costs to concession revenue	23%	unchanged	25%	23%
Advertising as percentage of revenues	2%	unchanged	1.1%	1.3%
Employee wages and benefits as percentage of revenues	19%	unchanged	18.1%	17.3%
Theatre costs as percentage of total revenues	12%	unchanged	12.2%	14.3%
General and administrative as percentage of total revenues	6%	unchanged	2.3%	2.6%
Operating margin	9%	5%	5.4%	4.4%
Net profit margin	6%	4%	3%	3%
Return on assets	4.7%	5%	4%	4.5%
Return on equity	10.4%	7.5%	10.8%	7.4%



**APPENDIX IV**  
**INTERNALLY PREPARED FINANCIAL STATEMENTS**

*First View Theatres Inc.*  
*Statement of Earnings*  
*For the year ended December 31, 2019*  
*(in thousands of dollars)*

Revenues	
Box office revenue – regular	\$ 37,768
Box office revenue – PPV	3,786
Concession revenue	23,670
Other income – arcade games	657
Other income – party room rentals	375
	66,256
Expenses	
Film costs	23,700
Concession costs	5,444
Advertising and promotion	831
Amortization	5,525
Employee wages and benefits	11,450
Employee bonuses	400
Rent	4,786
Theatre operating costs	9,480
General and administrative	1,710
	63,326
Operating income	2,930
Equity income from Connery's Bar and Grill	310
Finance costs – net interest expense and foreign exchange gains and losses	(558)
Income before taxes	2,682
Income taxes	(671)
Net earnings	\$ 2,011
Statement of retained earnings	
Balance – beginning of year	\$ 18,336
Net earnings	2,011
Dividends	(600)
Balance – end of year	\$ 19,747

**APPENDIX IV (continued)**  
**INTERNALLY PREPARED FINANCIAL STATEMENTS**

*First View Theatres Inc.*  
*Balance Sheet*  
*As at December 31, 2019*  
*(in thousands of dollars)*

<b>Assets</b>	
Current assets	
Cash and cash equivalents	\$ 2,362
Concession inventories	313
Prepaid expenses	285
Total current assets	2,960
Investment in Connery's Bar and Grill (equity method)	2,193
Property, plant and equipment (net)	38,648
Intangible assets	890
Goodwill	145
<b>Total assets</b>	<b>\$ 44,836</b>
<b>Liabilities</b>	
Current liabilities	
Trade payables and accrued liabilities	\$ 1,705
Film costs payable	2,273
Income taxes payable	350
Employee bonuses payable	400
Current portion of long-term debt	1,275
Total current liabilities	6,003
Long-term debt – term loan	11,486
Total liabilities	17,489
<b>Shareholders' equity</b>	
Share capital	7,600
Retained earnings	19,747
Total shareholders' equity	27,347
<b>Total liabilities and shareholders' equity</b>	<b>\$ 44,836</b>

**APPENDIX V**  
**INFORMATION ON INVESTMENT IN VRT**

**Virtual Reality Tech Inc. (VRT) Investment Proposal**

- Investment in common shares – \$2 million is required for a 10% ownership. Yuxuan would own 85%, with 5% widely held. Currently, VRT has no debt.
- VRT is expected to have losses totalling \$1.5 million over the next five years, mainly due to the research and development costs. Yuxuan estimates that the technology could be sold for \$100 million in five years' time. He has already had lower offers from three potential buyers.
- Any future sale negotiation will include the right of FVT to purchase the technology at a 20% reduction from the normal selling price, giving FVT a competitive advantage when upgrading its theatres.

**APPENDIX VI  
INFORMATION ON SARNIA LOCATIONS**

Forecasted 2020 revenues per attendee are based on 2019 actuals and the proposed changes being considered.

	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>
	<b>Keep open with current prices</b>	<b>Lower price by 15%</b>	<b>Renovate</b>
Forecast box office revenue	\$7.88	\$6.70	\$7.88
Film costs (at 57%)	(4.49)	(3.82)	(4.49)
Admission contribution margin	3.39	2.88	3.39
Plus concession contribution margin	2.88	2.88	2.88
<b>Total contribution margin per attendee</b>	<b>\$6.27</b>	<b>\$5.76</b>	<b>\$6.27</b>
Expected number of attendees	470,030	517,033	525,000
Total contribution margin	\$2,947,088	\$2,978,110	\$3,291,750
Operating loss before taxes	\$(404,612)	\$(373,590)	\$(329,950)
Total annual cash flows before taxes	\$175,788	\$186,810	\$500,450
<b>Breakeven attendance (calculated)</b>	<b>534,561</b>	<b>585,365</b>	<b>577,624</b>

**Option 4 – Close Sarnia locations**

Listing of net assets at the Sarnia locations:

Carrying value of net assets:	
Inventories	\$ 23,000
Leasehold improvements and equipment	2,451,500
Goodwill	145,000
<b>Net carrying value</b>	<b>\$ 2,619,500</b>

**APPENDIX VI (continued)**  
**INFORMATION ON SARNIA LOCATIONS**

**Option 4 – Close Sarnia locations (continued)**

Add additional cash outflows to close:	
Total costs to close and terminate leases (before taxes)	\$ 609,031
Severance payments for both locations	50,000
<b>Total cash outflows required to close</b>	<b>\$ 659,031</b>

**Notes:**

- The operating loss before taxes includes the allocation of overhead costs. Fixed costs include an overhead allocation of \$310,900 from head office. Closure of the locations would reduce overhead costs by only \$95,000.
- Costs of \$609,031 to close and terminate leases consist of lease cancellation penalties for the remaining 38 months of the leases, plus an estimated cost of \$160,000 to remove the leasehold improvements, equipment, and games.

**APPENDIX VII**  
**INFORMATION ON CONNERY'S BAR AND GRILL**

1. The most recent joint venture income statements is as follows (*in thousands of dollars*):

<b>Summarized Income Statement</b>	2019
Revenues	\$ 5,141
Expenses	
Operating costs	4,140
Fred's salary	450
Income before taxes	551
Income taxes (25%)	(138)
Net earnings	\$ 413

2. Excerpts from the offer from George McCain, dated May 4, 2020, are as follows:

- The price offered is \$2.75 million.
- The closing date will be June 30, 2020.
- The full purchase price will be paid in cash on the closing date.
- The offer includes all of the food and beverage inventory and equipment, tables and chairs, tableware, linens, kitchen equipment, and computer systems.

3. Excerpts from the JV arrangement are as follows:

- If one of the parties wants to sell their share, the other party has the right of first refusal.
- The price to buy out the other party's share will be determined as follows:  
Adjusted annual net earnings × Multiple, where:
  - Adjusted annual net earnings is equal to the net earnings as calculated using the most recent annual financial statements plus the after-tax cost of Fred's salary less a reasonable after-tax cost to replace Fred.
  - Multiple is equal to 1 divided by a discount rate, where the discount rate is the required rate of return for a privately held restaurant business at the date of the valuation.
- The purchase price will be payable in five equal annual instalments, with the first instalment due on closing of the sale.
- If the other party is not able to pay this purchase price, the seller has the right to find another buyer. If another offer is made, the other party has the right to match the terms of such an offer.

**COMMON FINAL EXAMINATION  
SEPTEMBER 13, 2017 – Day 1**

**Case (PRI-Version 2)**

**(Suggested time: 240 minutes)**

Phoenix Risen Incorporated (PRI) has gone through a period of significant change, with the passing of ownership to the third generation of the Legault family. You, CPA, have become a trusted member of the management team.

It is now January 14, 2018. As part of the ownership transfer, you helped develop a strategy to meet the needs of both PRI and the former controlling shareholders. The senior family members have retired, and Jennifer and Maggie are no longer actively involved in the business. As Martina continues to modernize the company, your advice remains key. Martina and George continue to head up Phoenix and Cinder, respectively, and Martina also oversees PRI as a whole.

PRI did not acquire Sparky, choosing to focus instead on the Phoenix and Cinder brands. Phoenix is in the process of closing its suburban locations because they are unprofitable and no longer fit with PRI's vision. Accepting that online shopping is a reality it must embrace, PRI created a website for Phoenix and is now making longer-term decisions regarding Phoenix's and Cinder's online presence. To avoid the problems experienced with their venture into suburban stores, the move to online must be well executed. The decision to close stores and reduce Phoenix's size has increased the need to grow PRI through online sales in Canada, and possibly into the U.S. and international markets.

There continues to be increasing pressure on margins in the retail industry. This is partly due to the increased popularity of online shopping and to consumers' ability to use technology to research prices and find deals. High-end U.S. retailers are also opening stores in Canada where customers can still have a face-to-face experience. Specialty box stores are starting to open satellite locations in small centres, where many Cinder stores are located. The economy is stable, but the Canadian dollar has lost value relative to the U.S. dollar.

Phoenix proceeded with the sale and leaseback of its flagship Vancouver store. Phoenix obtained good rates and the option to repurchase the property at the end of the 10-year lease. Having the repurchase option made the decision easier; however, there are still many issues to resolve with respect to Phoenix's real estate holdings.

There is concern about the quick pace of change in the industry and the relationship between the online and storefront aspects of PRI's business. Martina is particularly interested in ensuring that decisions in these two areas are made with long-term success in mind. She asks you to advise her, and the board, on whether they are moving in the right direction and on the decisions to be made. Excerpts from the discussions with Martina are included in Appendix I.

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**APPENDIX I  
EXCERPTS FROM CPA'S DISCUSSIONS WITH MARTINA**

**Online Shopping**

The decision not to proceed with Sparky or its online shopping system was a tough one. Ultimately, its corporate culture differed too much from PRI's, and we were concerned about the data breach that had occurred. This seems to be a common concern for online sales, and other large retailers have experienced similar events. Despite this, I am now convinced of the need for an online presence. As a result, we moved into online shopping.

As you know, Phoenix is one of the few online retailers that serves the Canadian market exclusively. This strategy allows us to fulfill our original mission of "being a hallmark retailer in the Canadian market, with strong traditions and values" while becoming more accessible to a wider market. Our mission statement now reflects the online addition: "Our mission is to serve our customers through our stores by providing a high-quality retail experience. The experience is tailored to meet the needs of Canadians by providing value, quality, choice, and service they can trust. *From in-store to online, we make it easy for Canadians to shop with us.*"

In an effort to be online quickly, we rather impulsively entered into an 18-month contract with a service provider, Express Site (Express). With Express, we have put approximately 25% of Phoenix's product line on our website, and we should have the remainder up before the end of the contract. We also want to develop an online presence for Cinder. Once Phoenix's site is fully operational, we will begin bringing Cinder online. We are considering creating "sister sites" and linking the websites so that when a customer visits one site, there is a link to the other, and orders can be combined in one virtual shopping basket and processed with one checkout.

The Express contract expires on June 30, 2018, unless we renew it. We need to decide whether to continue with Express. We have another proposal, from Alpha Shop (Alpha). Both proposals are outlined in Appendix II. While we have been happy with many aspects of Express's service, there have also been issues (Appendix III).

We want to be personal with our customers, even online. There is a lot of opportunity to use technology to target our customers. We think marketing campaigns that cater to our customers' individual needs directly would engage them and benefit our sales. A recent survey of both Phoenix and Cinder customers might help with your analysis (Appendix IV).

The reality is that we need a strategy for e-commerce across PRI. For both Phoenix and Cinder, we must decide how to best approach our clientele.

**APPENDIX I (continued)**  
**EXCERPTS FROM CPA'S DISCUSSIONS WITH MARTINA**

**Warehousing and Distribution – Online Sales**

We started closing Phoenix's suburban locations a few months ago and, in order to quickly start online sales for Phoenix, began using our Winnipeg location as a temporary warehousing and distribution centre. Putting staff out of their jobs is not something we like to do. Using this location enabled us to reduce the number of layoffs. If feasible, I would like to continue to use the Winnipeg location for our online orders, but I recognize that its physical layout is not conducive to stocking products so they can be efficiently located, packaged, and readied for customer delivery.

Orders are processed at the Winnipeg warehouse in one to two days, and shipping times range from one to seven days, depending on the customer's location. Shipping from Winnipeg to locations such as Newfoundland is proving to be slower than we thought. I expect that modifications can be made to increase the efficiency and speed up the processing time but am not sure.

Our stores could perhaps be used for online distribution, but they would require renovations in order to accommodate the additional inventory and processing functions. Customer orders would be sent from the closest store with available inventory, so there would be no regional differences to contend with. Processing time from the stores is expected to be three days, since they are not dedicated to this service exclusively, and shipping times would likely range from one to three days, depending on the location of the inventory and the customer's location.

As we get the remaining Phoenix inventory on the website and establish Cinder's website, we anticipate that online sales will continue to grow. We also need to consider any impact from offering free shipping or other options (Appendix V), and any potential expansion to the U.S. market.

**APPENDIX I (continued)**  
**EXCERPTS FROM CPA'S DISCUSSIONS WITH MARTINA**

**Other**

Maggie's son Jeff recently graduated with a MBA in international business, and I hired him as the VP of e-commerce, a new position. The VPs of marketing are not happy because they think I am interfering with their area of expertise and giving preference to family members again.

Jeff's vision is to make PRI a global e-commerce retailer. He believes that we need to expand our online presence and let go of our emotional attachment to storefronts, and that we can do this while remaining true to our core beliefs. He sees us promoting Canadian products to the world, starting with the U.S., and supplying Canadians living around the globe through our online presence. He sees us developing an "app" for mobile devices and using social media for promotion and actual purchases. His ideas include shipping directly from suppliers to customers, teaming up with other businesses to reach new customers, creating an interactive web magazine, and possibly adding entertainment to our websites. According to Jeff, we are behind, catering to Generation X when we should be looking ahead to the Millennials!

At the same time, we have to decide what to do with our real estate holdings. We have deferred much needed capital expenditures because we are evaluating whether we should maintain ownership of some or all of our properties. George insists we should be expanding our real estate interests (Appendices VI and VII).

I know we need to continue to evolve, but George and Jeff have such different views about the direction PRI should be heading.

Please consider all this in your analysis of our e-commerce strategy and overall management approach.

## **APPENDIX II ONLINE SHOPPING WEBSITE PROPOSAL**

### **Express Site (Express)**

Express provided Phoenix with an efficient means of getting its online site operational. Express is an American company that traditionally works with small businesses that want to establish online shopping without the level of sophistication of larger retailers.

Express set up a website, designed in collaboration with Phoenix. The basics of the website image are pre-set and unchangeable, but the store logo and brand colours can be used to customize the look.

The site's categories are organized to match the departments in Phoenix so that Phoenix's customers can easily navigate the layout to find specific items. Inventory items must be individually entered in Express's system by Phoenix, allowing Phoenix to control which items are available to customers online.

When customers find an item to purchase, they add it to their shopping cart and continue shopping until ready to check out.

There is no customer profile or login on the Express site. Customers simply enter a shipping address. Express's checkout system relies on a partnership with FriendlyPay, an online payment service that provides security over payments and a customer guarantee. When customers check out, they are directed to FriendlyPay to submit their payment and are then redirected back to the main site. The FriendlyPay system provides additional controls over the customer's payment information.

Once their order has been submitted, the customer receives an email confirming the order and the amount charged to their credit card. Because the Express platform is unable to synchronize with Phoenix's inventory system, customers receive a second email within 24 hours, confirming that the product is available and providing the anticipated delivery date. If not available immediately, the item's anticipated delivery date is provided based on when it will be restocked.

Phoenix paid \$1.25 million upfront to Express for the establishment of the site, which commenced operation on January 1, 2017. An additional \$250,000 was paid for the inclusion of the first 25% of inventory items, with the remaining 75% still to be included at an additional cost of \$750,000. After 18 months, an ongoing annual maintenance fee of \$175,000 is required, and the contract is renewable on a yearly basis at Phoenix's discretion. If Cinder were to use Express, it would incur an additional set of fees, including the upfront payment, the fee for adding inventory, and the ongoing maintenance fees.

Express is capable of adding U.S. versions of its sites. This would require the creation of a separate site, and it would incur an additional set of the fees listed above for each U.S. site.

**APPENDIX II (continued)**  
**ONLINE SHOPPING WEBSITE PROPOSAL**

**Alpha Shop (Alpha)**

Alpha is a Canadian IT company specializing in online shopping platforms, mobile applications, and social media. Known as a leader in the industry, Alpha has built its reputation by gaining shoppers' trust and by providing retailers with an easy-to-use system. Each site is customized to reflect the image of Alpha's client company. Alpha aims to reflect online the in-store experience that shoppers are accustomed to. Alpha can customize separate sites for Phoenix and Cinder or, at a reduced rate, can use the same format for both. It can also link the two sites, allowing customers to create one profile and combine orders from both stores.

When a customer enters an Alpha-created site, they are provided with an overview of the store's departments, easy access to the weekly promotions, and a handy search function at the top of the page. The search function allows customers to customize the search and to limit results within specific parameters.

The Alpha system would be synchronized with PRI's inventory so that items are automatically included on the site and customers are aware of inventory levels when shopping. PRI can also choose not to sell certain items online, in which case store inventory details will be provided, but customers will be unable to order the product from the website.

Customers can further improve their individual shopping experience by setting up a profile. The profile includes the customer's billing address and phone number, as well as an option to add additional mailing addresses. Customers can choose to enter their payment information and have it stored in their profile. Alpha's system will track all shopping history and use the information to predict other products that customers may like. PRI could use this information to target customers through direct marketing. For example, a customer who has viewed jewellery and accessories one day may receive an email the next day about similar products.

When a product is selected, customers add it to their shopping cart. Once the customer is ready to check out, the system prompts the customer to either log in using their profile or continue as a guest. Customers review the order before confirming the purchase. PRI has the option to store the credit card information for future use. The system compares the billing address to the address for the credit card entered, which verifies that the card belongs to the user ordering the product. Upon completion of the order, a confirmation email is sent, including an anticipated delivery date. Customers can also log into their account for up-to-date tracking information.

Alpha requires a five-year contract and provides the option of a five-year renewal term. Development of sites for both Phoenix and Cinder would cost \$2.6 million in total, with a \$1-million annual fee.

Alpha's website is easily convertible to U.S. currency, handles different tax rates, and any shipping options.

**APPENDIX III**  
**ONLINE FEEDBACK ON CURRENT PHOENIX WEBSITE**

*Glad you finally have online shopping available! I like to purchase items in your store, but it was nice to be able to research it online. I was surprised by the selection, though – it seems that you have more available in the store. The site itself seemed rather amateurish in comparison to the quality I expect and associate with Phoenix.*

*– Shop-a-holic*

*I ordered a product online for a gift, only to find out a few days later that you don't have it in stock. Now my sister's gift will be late! I didn't even have the option to cancel the order when I discovered this. Unacceptable.*

*– Mad Sis*

*I ordered a sweater, which arrived on schedule. I am nervous shopping online, but I trust FriendlyPay, and this made the experience feel secure. Thanks!*

*– Secure Spender*

*I loved the free shipping! I will definitely use Phoenix for all future online purchases. It's a great way to send gifts to relatives across the country without additional costs. I also love that you are exclusively Canadian. I am happy to support you!*

*– Family Afar*

*The FriendlyPay steps were cumbersome. I disliked having to set up another account! Why can't I just pay you directly? It would be faster.*

*– Speedy Shopper*

*I was excited about the site, but the process was quite slow and not comparable to other retailers. I expected more from Phoenix. Not knowing if goods are in stock means I won't be ordering from you.*

*– High Expectations*

*Your products are great! I am moving to the U.S. shortly. With online shopping, there is no reason not to expand outside of Canada! My American family had never heard of Phoenix, but I know they would love you.*

*– Loyal and Hopeful*

**APPENDIX IV  
ONLINE SHOPPING SURVEY**

The following survey was provided to both Phoenix and Cinder shoppers. Shoppers were asked to provide an answer on a scale of (1) to (5), with (1) being “strongly disagree” and (5) being “strongly agree.”

The average results were as follows:

	<b>Phoenix</b>	<b>Cinder</b>
You regularly use a computer with online access.	4.0	4.9
You frequently (more than six times a year) purchase items online.	2.1	4.0
Before purchasing an item in a store, you research it online.	1.9	3.1
You are comfortable providing information online.	1.9	3.5
Technology invading your privacy is a concern to you.	4.2	3.0
You prefer a website that remembers your information.	1.5	4.1

In addition, customers were asked to provide feedback on what the most important aspects of an online shopping website are to them.

The most common replies were as follows:

<b>Phoenix</b>	<b>Cinder</b>
<ul style="list-style-type: none"> <li>▪ Same experience as in the store</li> </ul>	<ul style="list-style-type: none"> <li>▪ Product information on what is in stock and pricing by store</li> </ul>
<ul style="list-style-type: none"> <li>▪ Ease of purchase</li> </ul>	<ul style="list-style-type: none"> <li>▪ Personalized shopping</li> </ul>
<ul style="list-style-type: none"> <li>▪ Ease of returns</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ease of returns</li> </ul>
<ul style="list-style-type: none"> <li>▪ Security</li> </ul>	<ul style="list-style-type: none"> <li>▪ Navigability</li> </ul>

## APPENDIX V SHIPPING AND RETURN POLICIES

Believing in customer service and wanting to maintain a high-end feel, Martina felt that charging for shipping would not meet the expectations of Phoenix's customers. In the current year, all orders were shipped for free. Goods could be returned within thirty days, and customers either returned the goods free of charge to a store or paid for any shipping incurred. Phoenix experienced a quick online ordering uptake, since it allowed customers to purchase goods with little risk.

Approximately 25% of total online orders are currently being returned. This has been frustrating, as Phoenix has historically experienced much lower return rates. The cost of shipping goods is high, particularly when shipping out of Winnipeg. When goods are returned, Phoenix loses the sale and incurs shipping and restocking costs, which is negatively impacting its margins.

Martina has had the marketing department analyze the impact of various shipping options on the volume of sales. She is considering three options: maintaining the free shipping on all orders, providing free shipping on orders of \$50 and over, or charging all shipping costs directly to the customer. Ignoring the returns, the estimated 12-month projections for each option are as follows:

	<u>Free Shipping</u>	<u>Free Shipping on Orders of \$50 and Over</u>	<u>Shipping Billed to Customer</u>
Number of orders of \$50 and over	50,890	75,200	48,362
Number of orders under \$50	60,765	13,564	12,975
Total expected revenues*	\$ 13,081,000	\$ 16,376,000	\$ 11,117,000
Total expected COGS*	<u>7,848,000</u>	<u>9,825,400</u>	<u>6,670,200</u>
Margin on orders	<u>\$ 5,233,000</u>	<u>\$ 6,550,600</u>	<u>\$ 4,446,800</u>

\*On average, shipping costs are \$20 for orders of \$50 and over, and \$9 for orders under \$50. Shipping costs are expected to decrease if shipped from locations closer to the destination, rather than from Winnipeg. In the above table, revenues and cost of goods sold exclude the shipping.

Approximately 75% of orders are from customers residing less than 100 kilometres from a Phoenix store.

Martina would like your assessment of these alternatives. Additionally, she wonders if Cinder should follow the same approach or consider a different policy. If U.S. sales proceed, the preference is to use the same policy for both countries.



## **APPENDIX VI NOTES FROM MEETING WITH GEORGE**

Just because we decided not to pursue the REIT idea does not mean we should ignore our real estate holdings entirely. Most of our returns have been generated through our real estate. For example, our Toronto retail centre had a \$400 million fair market value five years ago, and it is now valued at \$700 million (Appendix VII).

The increase in real estate values makes it tempting to sell all our properties. But PRI would then be strictly a retail operation, which, in my opinion, results in us being less diversified and exposed to higher business risk. While Jeff is all about e-commerce, I think real estate and e-commerce can and should support each other.

While we have started closing Phoenix's suburban stores, the downtown stores are part of our history, so upgrading them is important. I think we should also upgrade the two malls we own and use the rental income as a stable revenue source. Converting the retail space in our Winnipeg mall to a warehouse means there is no longer an anchor tenant, which may reduce the mall's attractiveness to other retailers.

PRI should acquire additional commercial rental property in the downtown cores of cities where we currently have stores, and it should look at buying suitable buildings for a store in Halifax and St. John's, so we have stores from coast to coast.

I have updated the information on our Phoenix properties, including their fair values, mortgages, and capital expenditures (Appendix VII). I am convinced that real estate is the only thing guaranteed to provide a good rate of return and increase in value over time. In the past few years, the Toronto retail centre has increased in value by almost 20%. We should have no problem getting mortgages to fund the capital expenditures required and to acquire more properties. We have \$1,400 million in equity from our properties that should be easily convertible to cash. If we use the properties as security for a mortgage, the interest rate should be low and we can choose a long amortization period. I plan to get the capital expenditures underway as soon as possible.

In the past, we bought properties for the purpose of opening stores and did not focus on managing the properties as a stand-alone business. I propose that we change that — we should be increasing the number of properties we own, not divesting.

**APPENDIX VII**  
**BACKGROUND INFORMATION ON PHOENIX PROPERTIES**  
*(in millions of dollars)*

		FMV	Historical Cost	Mortgage	Capital Expenditure Estimates	
					Year	Amount
Toronto	Retail centre	\$700	\$120	\$0	2018	\$28
Calgary	Retail centre	\$490	\$300	\$104	2018	\$13
Montreal	Building	\$4	\$1	\$0	2018	\$1
Edmonton	Suburban mall	\$300	\$375	\$90	2019	\$20
Winnipeg	Suburban mall	\$90	\$125	\$0	2019	\$30
<b>Total</b>		<b>\$1,584</b>	<b>\$921</b>	<b>\$194</b>		<b>\$92</b>

The mortgages mature in the following years:

Montreal    2018  
Edmonton    2029  
Calgary      2033

**APPENDIX C**

**SEPTEMBER 14, 2017 – DAY 2  
SIMULATION AND MARKING GUIDES**

**COMMON FINAL EXAMINATION  
SEPTEMBER 14, 2017 – Day 2**

**Case**

**Assume the pre-selected role in which you will be formulating your response. Answer all requireds as specifically directed in your role. Within the requireds for each role, candidates are directed to look at specific additional appendices, which are unique to each role. Use only the information you have been directed to refer to.**

**Information that is shared by all roles is presented in the “Common Information” section. Additional information, customized to each role, is presented in the “Specific Information” section.**

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## **BACKGROUND COMMON INFORMATION FOR ALL ROLES**

Gloria Ferguson founded Ferguson Real Estate Inc. (FRE) in 2000. She was concerned about the waiting lists and quality of affordable public housing in Canada and wanted to help while making a small return. FRE is a private company that owns and manages affordable rental apartment buildings in the cities of Prince Joel and Bluebell. Gloria is a wealthy real estate investor who invested \$8 million from an inheritance in exchange for 100,000 common shares in FRE. She is the president and CEO and chair of the board.

Despite its philanthropic mission, FRE is structured as a for-profit entity, and Gloria is not interested in changing this. FRE targets a 3% pre-tax return on sales and a 3% return on equity. To achieve its return, FRE relies on high occupancy, good rent collection, and the efficient operation of its properties. Occasionally, FRE builds its own buildings, and, in those cases, efficient construction contributes to FRE's success on the project.

Since inception, FRE's mission statement has been: *To provide affordable rental apartments.* FRE is currently focused on helping young individuals and families. Recently, its management has been contemplating some new and different projects.

Because she now sits on many charity boards, Gloria has devoted less time to the business recently. However, because there is such a great need for affordable housing, she is still interested in obtaining additional funds for FRE. She is aware that leading economists expect interest rates to rise.

It is now September 16, 2017. FRE has a September 30th year end, follows ASPE, and uses the taxes-payable method to account for its income taxes. Fox & Fanoo, LLP (FF) was re-appointed as the company's external auditors for the September 2017 year end.

Prince Joel and Bluebell are located in the same Canadian province. As a result of industrial plant closures and young residents moving away to get jobs, both cities have aging populations. It is expected that property values in Prince Joel and Bluebell will become stagnant or decline in the near future. Both cities plan to raise their property taxes. The City of Prince Joel's municipal council has specifically expressed concern about the city's finances. Due to both provincial and municipal financial restrictions, there is reduced funding for public or other affordable housing initiatives in both cities, although all levels of government are in favour of such initiatives.

**BACKGROUND (continued)**  
**COMMON INFORMATION FOR ALL ROLES**

FRE's Chief Operating Officer, Andy, is an experienced commercial property manager who has been with FRE since its inception in 2000. Gloria met Andy while she was a board member of Halloran Construction Inc. (Halloran) and he was part of its senior management team. Andy maintains an active role on Halloran's board of directors. Reporting to Andy are the VP Administration, the VP Acquisitions, Construction & Maintenance, and the VP Rental Properties.

Gloria recently replaced the controller, who had worked her way up in the organization from a bookkeeper role, with Judy Kong, MBA. Judy is in charge of financial reporting, budgeting, treasury, and taxation. Judy is meeting with the external auditors to discuss the audit, and with members of FRE's finance department to deal with various projects. Appendix I contains business information about FRE, Appendix II covers information specific to FRE's rent-to-own (RTO) program, and Appendix III has information about events in 2017. The 11 months' financial results as at August 31, 2017, are presented in Appendix IV. Additional information, customized to your role, is presented in your role package.

**REQUIREMENTS FOR YOUR ROLE**  
**(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

**ASSURANCE REQUIREMENTS**

You, CPA, are a senior with Fox & Fanoo, LLP (FF). FF has been engaged by FRE mainly to audit the financial statements for the year ending September 30, 2017.

However, the audit engagement partner explains that, to help the board make some decisions at their next board meeting, your firm has first been asked to perform some analysis on two separate projects: the rent-to-own (RTO) program on Rudd Road and the luxury apartment project, Ole Tower. For the RTO program, Judy would like you to determine whether FRE can meet the board's objective regarding tenant ownership by December 31, 2018, with the current minimum purchase credit requirement of 10%, and then to consider whether the objective would be met if the minimum were reduced to 7.5%. For the Ole Tower project, she asks you to calculate what rent amount to charge in order to generate the target monthly cash flow. The partner has concluded that our firm can perform this additional work; however, this needs to be documented. As a result, the partner has asked you to draft a memo to the file that discusses the relevant independence rules and the potential threats involved with performing the additional work.

Once that analysis is complete, the audit engagement partner asks you to address any accounting issues that you note specific to the events that have occurred in 2017. Judy has also asked FF to review FRE's accounting treatment of the RTO purchase credits, including any forfeited credits to date. Judy is new to the company, is unsure about the current treatment, and wants to understand any potential reporting implications.

The partner then asks you to prepare the audit plan, which should include an assessment of the overall financial statement risk as well as a discussion of materiality. There were no significant audit or accounting issues encountered in the 2016 audit, and an unqualified audit report was issued. The overall financial statement risk for the 2016 engagement was assessed at low. Finally, the partner asks you to develop audit procedures for the accounting issues you identify.

The partner reminds you that Judy is also expecting our firm to provide her with a management letter discussing any control weaknesses identified, along with recommendations to improve these. She feels there are some processes that could be improved and is looking forward to hearing your thoughts on the subject.

**REQUIREMENTS FOR YOUR ROLE  
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

**ASSURANCE REQUIREMENTS (continued)**

Lastly, the partner has some special reporting issues for you to address with regards to the Carter Apartment funding agreement. The accounting for the grant has already been reviewed, but the partner would like you to determine the reporting options that are available to meet the Declaration requirements. You are also asked to discuss the procedures that could be carried out in relation to the Declaration and to identify any definitions and other issues that may require clarification from the funding ministries in order to perform the work.

In addition to the common appendices (I to IV), information provided in Appendix V (Assurance) is relevant for your analysis.



**REQUIREMENTS FOR YOUR ROLE**  
**(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

**FINANCE REQUIREMENTS**

You, CPA, are the senior treasury officer, reporting to Judy Kong, the controller of FRE. As Judy is currently short-staffed, she asks you to help her with work unrelated to your day-to-day job.

To help the board make some decisions at their next board meeting, Judy asks for your analysis of two projects: the rent-to-own (RTO) program on Rudd Road and the luxury apartment project, Ole Tower. For the RTO program, she would like you to determine whether FRE can meet the board's objective regarding tenant ownership by December 31, 2018, with the current minimum purchase credit requirement of 10%, and then to consider whether the objective would be met if the minimum were reduced to 7.5%. For the Ole Tower project, Judy asks you to calculate what rent amount to charge in order to generate the target monthly cash flow.

Next, Judy asks you to address any accounting issues that you note specific to the events that have occurred in 2017. Note that FRE has accounted for the RTO program properly for external reporting purposes.

Judy then states that there are a number of other analyses she requires that draw specifically on your treasury expertise. First, she wants a quantitative and qualitative analysis of the townhouse rental proposal on which the property management group has been working. Use 3% for the discount rate and ignore taxes in your analysis. As well, you should assess the underlying assumptions that management has made with respect to the townhouse rental proposal.

Next, Judy wants an evaluation of the company's debt capacity on its existing properties and an analysis of the two new options for debt financing.

She would also like a discussion of the advantages and disadvantages of the two proposed tenant ownership financing options.

In addition, Judy would like you to assess FRE's overall financial position. She also wants you to determine if FRE has met its 3% pre-tax return on sales and 3% return on equity objectives. Next, Judy would like your views on the investment offer received from the Bates Foundation.

**REQUIREMENTS FOR YOUR ROLE**  
**(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

**FINANCE REQUIREMENTS (continued)**

Finally, Judy would like your opinion on an appropriate weighted average cost of capital (WACC) for FRE, assuming that its current capital structure is its target capital structure. Judy would like you to use the capital asset pricing model (CAPM) to estimate the cost-of-equity portion of the WACC. She would also like you to comment on the various elements you include in the calculation and on the assumptions you make.

In addition to the common appendices (I to IV), information provided in Appendix V (Finance) is relevant for your analysis.

**REQUIREMENTS FOR YOUR ROLE**  
**(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

**PERFORMANCE MANAGEMENT REQUIREMENTS**

You, CPA, are a senior analyst, reporting to Judy Kong, the controller of FRE.

To help the board make some decisions at their next board meeting, Judy asks for your analysis of two projects: the rent-to-own (RTO) program on Rudd Road and the luxury apartment project, Ole Tower. For the RTO program, she would like you to determine whether FRE can meet the board's objective regarding tenant ownership by December 31, 2018, with the current minimum purchase credit requirement of 10%, and then to consider whether the objective would be met if the minimum were reduced to 7.5%. For the Ole Tower project, Judy asks you to calculate what rent amount to charge in order to generate the target monthly cash flow.

Next, Judy asks you to address any accounting issues that you note specific to the events that have occurred in 2017. Note that FRE has accounted for the RTO program properly for external reporting purposes.

Judy then asks you to do some further analysis. She would like you to identify risks to FRE and recommend ways to mitigate those risks. She then asks you for both a quantitative and a qualitative analysis of the proposal to outsource the maintenance function. While you are looking at staffing, Judy would like you to evaluate the organization's management incentive schemes at the various levels below VP and to suggest better metrics.

Judy thinks that some of FRE's recent activities do not align with the company's mission, and she would like your thoughts on this.

She would also like you to comment on the current mission statement and recommend any improvements with sufficient explanation and support.

Judy has noted that only quarterly income statements are currently provided to the board and management team. She wants you to consider what additional information the accounting team could provide that would help the board and management make better operational and strategic decisions.

Finally, Judy asks for your views on the company's governance structure and for you to provide recommendations for improvement.

In addition to the common appendices (I to IV), information provided in Appendix V (Performance Management) is relevant for your analysis.

**REQUIREMENTS FOR YOUR ROLE**  
**(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

**TAXATION REQUIREMENTS**

You, CPA, are the tax compliance and planning analyst, reporting to Judy Kong, FRE's controller.

To help the board make some decisions at their next board meeting, Judy asks for your analysis of two projects: the rent-to-own (RTO) program on Rudd Road and the luxury apartment project, Ole Tower. For the RTO program, she would like you to determine whether FRE can meet the board's objective regarding tenant ownership by December 31, 2018, with the current minimum purchase credit requirement of 10%, and then to consider whether the objective would be met if the minimum were reduced to 7.5%. For the Ole Tower project, Judy asks you to calculate what rent amount to charge in order to generate the target monthly cash flow.

Next, Judy asks you to address any accounting issues that you note specific to the events that have occurred in 2017. Note that FRE has accounted for the RTO program properly for external reporting purposes.

Judy then wants you to discuss how Gloria withdraws money from FRE, including a discussion of any benefits she currently receives. Judy wants you to suggest alternatives to the existing cash withdrawal strategy to reduce Gloria's tax liability, taking into account the consequences for FRE.

Judy also requests an analysis of the income tax implications of the investment offer from the Bates Foundation of America (BFA).

Further, Judy would like you to discuss some planning opportunities to ensure FRE consistently minimizes tax after the investment by BFA. Gloria wants to ensure that her personal taxes on any future share dispositions are minimized.

She would also like a discussion of the personal tax implications to Gloria of donating some or all of her shares of FRE to a Canadian registered charity. She asks you not to take into account the tax consequences to the corporation of the donation for now.

Next, Judy would like to know the tax implications of the proposed stock option plan, for both the company and the employees.

**REQUIREMENTS FOR YOUR ROLE**  
**(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

**TAXATION REQUIREMENTS (continued)**

Judy looked into the 2015 sale of the Ajax property. She thinks FRE forgot to apply subsection 13(21.1) of the *Income Tax Act*. She asks you to determine if this is true. She also noticed another error in the return and would like your advice on how to correct any errors in the 2015 return, and whether there is a deadline for making these corrections.

Judy originally expected that the Welzer property exchange would qualify under the replacement property rules and, therefore, recorded no transaction for tax purposes. However, the tax partner at Fox & Fanoo, LLP reminded her that the property would not qualify as a replacement property because it is rental property. Judy would like you to explain to her the tax implications of the transaction that results.

Finally, she also wants you to discuss the personal and corporate tax consequences of Gloria's planned transfer of the Fish Street property to the company, assuming Gloria sells the property to FRE for exactly \$1 million in cash, as proposed. She would then like your advice on any steps that can be taken to minimize the consequences you identify.

In addition to the common appendices (I to IV), information provided in Appendix V (Taxation) is relevant for your analysis.

## APPENDIX I – COMMON BUSINESS INFORMATION

### Properties

FRE owns 12 properties, of which some are new and others are over 60 years old. The VP Rental Properties updates a rough estimate of the fair market value of the properties regularly. At August 31, 2017, FRE's property portfolio was as follows:

Name	City	Net Book Value <sup>2</sup>	Estimated Value	Mortgage	Interest Rate <sup>3</sup>	Type	Renewal Date
Rudd Rd (RTO)	Prince Joel	\$ 982,800	\$ 1,200,000	\$ 756,000	2.74%	Variable	Mar 14/19
Blain River	Prince Joel	1,918,379	2,200,000	1,615,300	2.66%	Variable	Dec 31/17
24 Burnt St	Prince Joel	4,533,837	5,900,000	3,750,800	3.22%	Fixed	Sep 30/18
Carter	Prince Joel	3,627,302	4,658,000	2,920,566	1.77%	Variable	Mar 14/19
11 Calue St <sup>1</sup>	Prince Joel	454,283	500,000	151,500	3.25%	Variable	Mar 14/18
Lain Rd <sup>1</sup>	Bluebell	642,522	650,000	196,950	3.14%	Variable	Feb 28/18
Orpington	Bluebell	7,417,580	8,000,000	5,025,000	2.66%	Variable	Jan 1/19
Tangletree	Bluebell	7,743,999	7,800,000	5,693,600	2.78%	Variable	Oct 12/18
Largent	Bluebell	4,539,920	4,200,000	2,583,000	2.66%	Variable	Nov 26/18
Atman	Bluebell	6,400,800	6,500,000	4,173,000	3.44%	Fixed	Dec 31/18
Parker	Bluebell	2,604,844	3,100,000	1,925,100	2.88%	Variable	May 22/21
<b>Totals</b>		<b>\$40,866,266</b>	<b>\$44,708,000</b>	<b>\$28,790,816</b>			
<i>Properties recorded as inventory:</i>							
BOT	Prince Joel	9,256,412	9,520,614	9,066,667	2.94%	Variable	Dec 31/17

<sup>1</sup>11 Calue St and Lain Rd are vacant land that have been purchased for potential future developments.

<sup>2</sup>Cost minus accumulated amortization.

<sup>3</sup>Weighted average borrowing rate is 2.83%.

Companies like FRE typically have high debt-to-equity ratios. Developed properties are financed by either fixed- or variable-rate mortgages from various financial institutions at about 70% of market value and with various renewal terms. Vacant land can generally be financed with a mortgage up to 35% of the fair value of the property. Mortgages are occasionally renewed prior to maturity by incurring a penalty. To date, FRE has not taken any higher-interest-rate second mortgages on its properties.

**APPENDIX I – COMMON (continued)**  
**BUSINESS INFORMATION**

The VP Rental Properties sets the unit rates at about 10% to 15% below market. Some tenants are on social assistance, and many are employed in lower-paying occupations. In order to verify their income, prospective and current tenants are sometimes asked to provide their prior-year tax returns, copies of which are kept on file. When tenants' incomes increase, they are asked to move out in order that someone needier may move in, but they are never forced to leave. Disabled tenants get priority treatment from FRE. Occasionally, tenants move from one FRE property to another. For example, two Rudd Road property tenants moved to the Largent property during 2016, as the rent is cheaper without the RTO option.

There are four property managers, who report to the VP Rental Properties. Superintendents report to their respective property manager. Superintendents often live in one of the units of the property they oversee and are the first point of contact for tenants on all matters.

Three years ago, a foundation crack in a property built by Halloran resulted in FRE selling the property at a significant loss.

The company's properties sometimes experience vandalism, which represents a significant cost. The approach to preventing vandalism varies, depending on the different superintendents.

Maintenance costs are increasing for the older buildings. Some properties are heated with oil furnaces, and oil prices have increased recently, with further increases forecasted. As many major equipment purchases are made in the United States, the price of equipment has increased due to the weaker Canadian dollar.

No FRE employees have ever been laid off. Employee turnover has been consistently around 5% per year. Despite being paid salaries slightly below market, employees are generally happy. The company hires individuals who believe in the organization's philanthropic mission and tries to hire tenants who need a job.

Only the employees in the maintenance department are unionized. The company provides a health plan for all employees, including Gloria, covering specified medical and dental costs.

**APPENDIX II – COMMON  
RENT-TO-OWN PROGRAM (RTO)**

On September 1, 2013, FRE opened the 12-unit Rudd Road Apartment in Prince Joel with a new concept. Of the \$1,100 monthly rent, \$275 is a purchase credit toward buying the unit. Rent is due on the first day of the month. The rent-to-own (RTO) program is designed to help tenants save for a down payment. All the units have an identical layout.

The purchase conditions are as follows:

1. The unit purchase price is the fair value at the time of purchase.
2. The tenant must accumulate at least 10% of the unit price in purchase credits before purchasing the unit. The tenant must arrange their own mortgage financing for the balance of the purchase.
3. After three consecutive months of unpaid rent, the accumulated purchase credits are applied to the overdue rent, and 50% of the remaining purchase credits are forfeited.
4. If the tenant moves out of the building, they forfeit 50% of the purchase credits. The remainder is refunded.

The board's objective is to have 50% of the units owned by tenants by December 31, 2018. Andy feels the minimum purchase credit requirement may need to be reduced from 10% to 7.5% in order for this objective to be met.

The property manager has prepared the following status report:

**Monthly rent:                   \$ 1,100                   Start of program:   September 1, 2013**  
**Purchase credit:               \$ 275                    Report date:         August 31, 2017**

Unit	Start of Current Tenancy	Purchase Date	Purchase Price	Purchase Credits
1	Jan 1, 2016			\$5,500
2	Sep 1, 2013	June 30, 2017	\$125,000	NA
3	Dec 1, 2015			\$5,775
4	Oct 1, 2015			\$6,325
5	Aug 1, 2014			\$10,175
6	Apr 1, 2016			\$4,675
7	Sep 1, 2013			\$13,200
8	Oct 1, 2015			\$6,325
9	Sep 1, 2013	Aug 31, 2017	\$130,000	NA
10	May 1, 2016			\$4,400
11	May 1, 2016			\$4,400
12	Dec 1, 2014			\$9,075



### APPENDIX III – COMMON 2017 EVENTS

#### Property Values

Judy is concerned about how some valuation issues might affect the accounting for certain properties as a result of some information that has recently come to light:

- Largent – FRE received the latest municipal property tax assessment for the Largent property, which showed an estimated fair value of \$4.56 million. FRE will be appealing the property tax assessment based on a more recent report from an external appraiser, which valued the property at \$4.2 million. The building generally achieves break-even.
- Tangletree – As the crime rate in the neighbourhood has sky-rocketed, the occupancy rate of the Tangletree property in Bluebell has decreased substantially over the last 15 months. Fearful of becoming victims themselves, many tenants left over the past four months, and these units remain vacant.
- Atman – Five months after Halloran finished building it, a large crack was found in the foundation of the Atman building. The property is still habitable and occupancy is 100%. Andy told the VP Acquisitions, Construction & Maintenance not to investigate the crack, stating it is not a significant problem.

#### Ole Tower Luxury Apartments

To subsidize FRE's philanthropic rental properties, FRE has decided to build a luxury apartment building, Ole Tower. The land and building for an 18-unit complex will cost \$4.105 million. After considering the down payment, the monthly blended mortgage payments will be \$18,049, for 20 years. Additional costs to FRE are as follows:

Expense	Cost for the Entire Building	Occurrence	Extra Monthly Costs per Unit Rented
Municipal taxes	\$127,255	Annual	None
Natural gas	\$4,600	Monthly	\$11.51
Electricity	\$2,010	Monthly	\$46.20
Repairs and maintenance	\$28,000	Annual	None

Any future cost increases are assumed to be offset by rent increases. Gloria would like the project to generate net monthly cash flows of \$10,000 until the mortgage is repaid in full. She is unsure whether FRE will be able to keep all 18 units occupied on a continuous basis, but expects it will have somewhere between 15 and 18 units occupied at any given time.

### APPENDIX III – COMMON (continued) 2017 EVENTS

#### Build-Operate-Transfer (BOT) Project

In recent years, the City of Prince Joel has had several disastrous public housing projects, with contractor cost overruns that the City absorbed, as well as construction deficiencies. To avoid such problems on the next public housing project, the mayor and council drafted a detailed contract and put the project up for bids in the summer of 2016. Thinking the project could be profitable and that it would draw on FRE's core strengths while also helping the City, Gloria submitted a bid for a rapid-construction modular housing project.

In October of 2016, FRE was awarded the contract. Construction began immediately. The key points of the 322-page contract are as follows:

- FRE will construct the 72-unit complex according to City specifications and on City land. The property is covered by the City's insurance at all times. Upon completion, the property must pass the City's initial inspection.
- FRE will rent out the units in accordance with the City's low-income housing regulations and will operate the building for a minimum of six months. If FRE complies with the contract terms, the City will cover the operating losses, including interest, up to the closing date.
- On October 31, 2017 (the "closing date"), subject to the City's second and final property inspection, the City will pay the contract price of \$9,520,614, take title to the building, and take over its operation from FRE.
- A required post-closing step includes FRE planting trees that, due to the species, must be planted in late November 2017.
- FRE will provide a one-year building warranty.

FRE subcontracted the construction to Halloran. After 17 inspection deficiencies were corrected, at a cost of \$74,300, the initial City inspection was passed.

A receivable from the City has been recorded as "other receivable" in the financial statements for the negative cash flow of \$184,230 incurred for the first six months of operation (March 1 through August 31, 2017).

The project has proceeded as planned, with just a few costs left to incur. The tree-planting costs and the warranty costs are expected to be \$44,000 and \$100,000, respectively, resulting in an expected net profit of 1.26%, compared to the budgeted 2.5%.

Gloria hopes some revenue related to the project can be recorded on the September 30, 2017, financial statements. An engineering firm hired to duplicate the City's final inspection has recently reported that the building will pass inspection.

**APPENDIX III – COMMON (continued)**  
**2017 EVENTS**

**Welzer Property Exchange**

On July 1, 2017, Welzer Properties Inc. (Welzer), a non-related party, agreed to exchange its Blain River apartment building in Prince Joel for FRE's Dogwood Road apartment building plus a \$200,000 interest-free note payable to Welzer, due in five years. Three weeks ago, an independent appraiser engaged by Welzer appraised the Blain River property at \$2.2 million, allocated as \$1.4 million for the building and \$0.8 million for the land.

The municipal property tax valuation of the Dogwood property was \$1.93 million in 2016, and was increased by the City's standard rate of 1.27% in 2017, to \$1,954,511. Property values are attributable at 70% to the building and 30% to the land.

FRE recorded the exchange at the cost of the Dogwood property given up, being the \$606,771 land cost and the \$1,111,608 net book value of the building (\$1,684,254 original cost less accumulated amortization of \$572,646) plus the \$200,000 note payable.

As the rental agreements expire, FRE plans to reduce Blain River rents by 10% to 12% to be consistent with rates for its other properties.

**Lawsuit**

On August 12, 2017, FRE received a letter indicating that it was named as the defendant in a lawsuit alleging that it had "failed to remove snow and ice" from its Parker property in Bluebell. One of the residents apparently slipped in the parking lot and is not currently able to work. The lawsuit is for a total of \$900,000, comprising physiotherapy and other bills totalling \$12,000, \$388,000 of lost current and future wages, and \$500,000 for "pain and suffering." The letter also indicated that the plaintiff may be willing to settle the matter for \$400,000 if the money is received prior to September 30, 2017.

FRE has been in contact with its lawyer, who stated she cannot comment on the likely outcome of the lawsuit due to a lack of available information. Additional information regarding the details of the claim is anticipated within the next two weeks.

**Financing**

The Bates Foundation of America, a large U.S. foundation, has approached Gloria with an offer to invest in FRE. Gloria is considering it. Financing discussions are also taking place with two new non-bank lenders, who will be making decisions based on the year-end financial statements.

**APPENDIX IV – COMMON  
DRAFT FINANCIAL STATEMENT EXCERPTS**

***Ferguson Real Estate Inc.*  
*Balance Sheet*  
*As at***

	<b>August 31, 2017</b>	<b>September 30, 2016</b>
<b>Assets</b>		
Cash	\$ 1,567,281	\$ 401,716
Rent receivable	31,252	17,522
Other receivable	184,230	0
Supplies inventory	26,482	27,842
Prepaid expenses	144,145	147,528
Property inventory	9,256,412	0
	11,209,802	594,608
Land	14,526,123	14,526,123
Property and equipment, net	26,703,156	27,411,582
	\$ 52,439,081	\$ 42,532,313
<b>Liabilities and shareholder's equity</b>		
Accounts payable and accruals	\$ 909,506	\$ 637,593
Current portion of mortgages & notes payable	11,309,156	1,767,482
	12,218,662	2,405,075
Mortgages & notes payable	26,748,327	26,895,827
Shareholder's equity		
Common shares	8,000,000	8,000,000
Retained earnings	5,472,092	5,231,411
	13,472,092	13,231,411
	\$ 52,439,081	\$ 42,532,313

**APPENDIX IV – COMMON (continued)**  
**DRAFT FINANCIAL STATEMENT EXCERPTS**

*Ferguson Real Estate Inc.*  
*Statement of Operations*

	<b>11-Months Ended August 31, 2017</b>	<b>Year Ended September 30, 2016</b>
Revenues	\$ 7,364,878	\$ 7,880,000
Expenses		
Property taxes	1,600,823	1,715,168
Utilities	509,712	546,120
General and administrative	2,041,029	2,148,452
Interest expense	981,446	992,242
Repairs and maintenance	1,147,115	1,262,879
Amortization	801,599	898,989
	<u>7,081,724</u>	<u>7,563,850</u>
Income before taxes	283,154	316,150
Income taxes	42,473	47,422
	<u>240,681</u>	<u>268,728</u>
Net income	<u>\$ 240,681</u>	<u>\$ 268,728</u>

***ASSURANCE ROLE  
ADDITIONAL INFORMATION***

## **APPENDIX V**

### **ASSURANCE – ADDITIONAL INFORMATION**

#### **Rent Collection**

Rents are due on the first of the month and are generally paid by pre-authorized debit withdrawals or cheque. Because of the fees involved, FRE does not allow tenants to use credit cards. In January 2017, in response to tenants having difficulty opening bank accounts, FRE allowed the superintendents to accept cash for rent. The superintendents hold onto the cash collected until they have time to deposit them, which can sometimes be months as they're typically pretty busy. Because of this delay between collection and deposit of cash payments, the property managers don't bother trying to reconcile the monthly rent due to the payments collected since they never match.

#### **Vandalism Repairs**

The property managers want to keep the tenants happy by repairing the damage as quickly as possible; therefore, they try not to get in the superintendents' way and just let them take care of it. For easy jobs, the superintendents purchase the necessary tools and materials and do the repairs themselves. For more complicated jobs, superintendents have the authority to hire whomever they feel necessary to do the work. The superintendents cover all of the costs, however significant they may be, and then send an email to their property manager with the amount they're owed. The property manager makes sure they're reimbursed on their next paycheck.

#### **Rent-to-Own (RTO) Purchase Credits**

Judy discovered that purchase credits are recorded in the deposit liability account as part of the "Accounts payable and accruals" account. Since the program's inception, four tenants have forfeited a portion of their purchase credits due to unpaid rent, and several other tenants have moved out. The non-refundable portion of these forfeitures has not been accounted for.

#### **Carter Apartment Building Funding**

In late 2016, FRE received joint funding from the Ministry of Indigenous and Northern Affairs Canada and the Ministry of Housing for the Carter Apartment Building. The funding included a commercial mortgage guarantee, which enabled a 1.3% interest rate reduction, and grant funding of \$200,000. Construction of the apartment building was completed on April 11, 2017, and tenants started moving in on May 1, 2017. Currently, 40 of the 46 apartments are occupied.

**APPENDIX V (continued)**  
**ASSURANCE – ADDITIONAL INFORMATION**

The funding ministries require an independent third party to provide a “Declaration” certifying that the following conditions have been met:

1. The \$200,000 must only be used to fund construction of the Carter Apartment Building.
2. Three bids must be obtained for all construction budget items over \$100,000, with the contract being awarded to the lowest bidder.
3. After May 1, 2017, occupancy, defined as rented apartments divided by total apartments, must be at least 80%.
4. At least 15% of apartments must be rented by Status First Nation members, as evidenced by a First Nations status card.
5. The grantee’s public accounting firm will issue a report by February 15 of each year, indicating that the grantee has complied with the contract conditions for the previous calendar year.



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***FINANCE ROLE  
ADDITIONAL INFORMATION***

## **APPENDIX V FINANCE – ADDITIONAL INFORMATION**

### **Townhouse Rental**

In order to help disadvantaged individuals in the Tangletree community, FRE is considering building its first townhouse rental complex of 20 units.

A \$106,000 engineering study is required for the project, \$44,000 of which has already been paid. The architect's design fee is expected to be \$48,500. The team has found a suitable piece of land, which can be purchased for \$390,000. As there are some leaky oil tanks on the property that require remediation, land decontamination will cost an estimated \$274,000. Paving the parking lot will cost \$140,000, and the per-unit construction cost is estimated at \$147,000.

The following per-unit monthly costs have been estimated: building maintenance – \$195; lawn and garden maintenance and snow removal – \$100; and vandalism repairs – \$85. Annual property taxes and utilities are estimated to be 2.21% of land and direct construction costs, including parking lot pavement costs. The parking lot will need repaving every 15 years, at a cost of \$68,000.

The team forecasts 90% to 95% occupancy at an initial \$1,380 monthly rent and a useful life of 40 to 50 years for the building, with the land annually increasing in value by 1.2%.

### **Vacant Land**

In the last three years, the property acquisition team has purchased vacant land for speculative purposes or for future construction. Vacant land can generally be financed with a 35% mortgage.

### **Company Financing**

FRE has a line of credit from a chartered bank that it occasionally uses, that has an interest rate of prime plus 3.2%. The bank has decided not to renew the line of credit. As they expect businesses to maximize their profits, none of the major banks were enthusiastic about FRE's business model. Therefore, the controller solicited offers for a replacement line of credit and has received the following two proposals.

**APPENDIX V (continued)**  
**FINANCE – ADDITIONAL INFORMATION**

**Thedco Inc.***Facility:*

- \$2 million special line of credit.
- Will finance a maximum of \$400,000 based on any two pieces of vacant land at 50% of the appraised value, over and above the special line of credit.

*Fees:*

- \$130,000 setup fee.
- Borrower will cover the lender's legal fees.

*Interest rate and security:*

- Prime plus 2% for the first two years.
- Prime plus 2.6% in Years 3 through 5.
- Shareholder to provide an \$800,000 personal guarantee.

*Other terms:*

- Cancellable by Thedco, on each anniversary date.

*Conditions precedent:*

- Personal net worth statement from shareholder.
- Annual audited financial statements, within 90 days of year end, plus quarterly reviewed financial statements.

**Kanada Bank Term Summary***Facility:*

- \$2.2 million line of credit.

*Fees:*

- No initial fees.
- \$40,000 annual renewal fee.

*Interest terms and security:*

- Prime plus 2.25% for five years.
- After Year 2, option to fix the interest rate at 4%.
- Second mortgages on all building properties owned by FRE.

*Other requirements:*

- Audited financial statements for the year ended September 30, 2017.
- Annual audited financial statements, within 90 days of year end.
- Cancellable if FRE defaults on any mortgages from any lender.

**APPENDIX V (continued)**  
**FINANCE – ADDITIONAL INFORMATION**

**Tenant Financing**

To allow more tenants to purchase apartments, FRE is considering two options other than the RTO:

- 1) In order for high-risk tenants to borrow at a significantly lower interest rate than they would typically obtain, FRE is considering guaranteeing tenants' third-party mortgage financing for up to 25 years. The guarantee is expected to reduce interest rates, on average, from 9% to 4% for these tenants. FRE would charge a yet-to-be-determined setup fee for the guarantee, paperwork would be simple, and the company would have recourse against the tenant if there was a guarantee call.
- 2) Another option is direct financing for the tenant via a secured mortgage for 95% of the unit value, to be repaid as a mortgage at 5% interest.

**Rental Property Companies – Industry Statistics (2017)**

Debt-to-equity ratio	4.3:1
Pre-tax income/equity	10.6%
Beta ( $\beta$ )	0.8
Expected return on market	9%
Average revenues	\$75 million
Average assets (market value)	\$400 million
Current prime rate	2.0%

**APPENDIX V (continued)**  
**FINANCE – ADDITIONAL INFORMATION**

**Bates Foundation of America (BFA) Offer**

An offer to finance has been received from BFA. This organization has a good reputation for philanthropy in the United States. However, it has recently been involved in controversial funding of genetically modified crops to help food shortages in an emerging-economy country.

The offer letter received from BFA is as follows:

Ms. Gloria Ferguson:

September 10, 2017

BFA's board of trustees is intrigued by your innovative approach to social housing.

Here are our proposed terms, with an anticipated closing date of December 31, 2017.

*Amount and form of investment:*

- The amount will be between \$9 million and \$10 million Canadian, subject to due diligence procedures.
- New common shares will be issued to BFA.
- After the transaction, BFA will hold 45% of the common shares.

*Special clauses and conditions:*

A shareholders' agreement will be required, with the following mandatory clauses:

- There will be a maximum of five board seats, and BFA will appoint three of the five seats.
- BFA must approve all new share issues and any dividends.
- No tenants may be evicted without allowing 180 days for alternative dispute resolution.
- FRE must use environmentally safe products in all its operations.
- Within two years of closing, FRE must invest \$2 million Canadian in U.S. housing initiatives approved by BFA. If not, the shares will be retractable, for the original amount, by the investor.

*Conditions precedent:*

- Receipt of audited September 30, 2017, financial statements.
- Due diligence, in a manner to be discussed with FRE.

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***PERFORMANCE MANAGEMENT ROLE  
ADDITIONAL INFORMATION***



## **APPENDIX V PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION**

### **Systems**

The company uses an off-the-shelf property management accounting system. The accounting department is generally pleased with the system. Although the system has ad hoc reporting capability, management has only been receiving quarterly statements of operations from accounting. One of the property managers has asked for more information to help manage operations, but has not asked for anything specific. At management meetings, Gloria often asks for a status report, and management has only reported on revenue and profit.

### **Other Activities**

In late 2016, FRE received joint funding from the Ministry of Indigenous and Northern Affairs Canada and the Ministry of Housing to build the Carter Apartment. The complex was built specifically to assist Status First Nation members with their housing needs. In 2017, funding was received from the City of Bluebell to upgrade three FRE complexes to better accommodate handicapped tenants. FRE is currently considering whether to build its first townhouse rental complex of 20 units to help disadvantaged individuals in the Tangletree community.

On August 17, 2017, several employees of an FRE contractor were severely injured in a workplace accident at the Orpington property, and this incident received a lot of negative press coverage. Although FRE was found to not be negligent, vacated apartments remain empty.

The property acquisition team has considered purchasing additional vacant land for speculative purposes or for future construction and will finance 35% of the purchase with a mortgage.

The VP Acquisitions, Construction & Maintenance has presented a confidential plan to cut maintenance costs through outsourcing. Outsourcing would eliminate nearly all of the Repairs and Maintenance line on the income statement. Within the Repairs and Maintenance expense are: salaries for the maintenance manager and all his related staff; external contractors; maintenance van costs; and maintenance parts and supplies.

**APPENDIX V (continued)**  
**PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION**

The main points of the outsourcing plan are as follows:

- Terminate the 11 unionized workers at an average termination cost of \$21,300 per employee, as per the terms of the Collective Bargaining Agreement, while retaining the maintenance manager, who is paid \$99,960, and his assistant, who is paid \$33,930.
- Sell the 12 maintenance vans for about \$12,000 each, and other maintenance tools and equipment for an estimated \$40,000.
- Issue a request for proposal for all of FRE's maintenance services, with detailed requirements and service levels. The contractor can bill for parts and supplies with a 10% markup on their cost.

The VP Acquisitions, Construction & Maintenance believes that, even with the markup, the cost of the parts and supplies will be less than what FRE currently pays. Three companies have expressed interest in bidding. Two of them have an excellent network of skilled tradespeople.

The VP Acquisitions, Construction & Maintenance believes annual bids will come in at \$850,000, but Judy is concerned the bids could come in as high as \$1.05 million.

The maintenance department's total cost for fiscal 2017, year to date, included a \$48,000 one-time refund for a contract cancellation, plus maintenance parts and supplies of \$154,822.

Although strikes by similar unions in nearby cities have become more common in the past 18 months, FRE's unionized employees have never been on strike. These employees are not overly busy and are regularly seen taking long breaks, resulting in repair work taking longer than scheduled. Because the jobs get done eventually and FRE wishes to avoid conflict with the union, FRE has not disciplined these employees.

**APPENDIX V (continued)**  
**PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION**

**Management Incentives**

The maintenance manager, property managers, and superintendents are eligible for two different bonuses. If FRE achieves a 3% pre-tax return on sales, the first bonus is equal to 6% of salary.

The following managers are eligible for a second bonus worth 3% of their salary:

- The maintenance manager can earn his second bonus if 12 specific objectives are met. For example, heating or air conditioning failures must be less than six hours in length, and the maintenance manager must hire at least one company tenant. [Because one of the objectives was not achieved, the maintenance manager has not received the second bonus for the past two years.]
- Despite having little control over the rent charged, property managers are expected to run their buildings efficiently and maximize rental revenue. They are rewarded their second bonus based on rent earned in the year versus budgeted rental income.
- There is one superintendent at each building who is responsible for dealing with tenants, such as welcoming new tenants, ensuring that rules are adhered to, dealing with tenant complaints, and making minor repairs. Superintendents earn their second bonus if head office receives no tenant complaints.

During 2017, a property manager was disciplined for moving friends into a unit ahead of those who had been on the waiting list longer than them. FRE does not approve of this practice; however, this manager was still awarded his bonus.

**APPENDIX V (continued)**  
**PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION**

**Board Composition**

FRE's board of directors consists of six people, including Gloria. Two are Gloria's friends – one is a retired elementary school teacher and the other has never been employed but sits on a local charity board with Gloria. The other directors are a business lawyer, a retailer who owns three stores in Prince Joel, and Gloria's uncle, a retired assistant fire chief.

The board meets quarterly to discuss customer service and quarterly income statements. The board meets annually to approve the annual financial statements, ensure that fire safety regulations are met, approve new projects that Gloria introduces, and occasionally resolve any legal issues that might arise. As Gloria is the sole shareholder and FRE has been successful to date, the board has yet to question any of Gloria's proposed projects. Also, because actuals have generally been close to projections, discussion of the financial statements has always been brief.

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***TAXATION ROLE  
ADDITIONAL INFORMATION***

## **APPENDIX V TAXATION – ADDITIONAL INFORMATION**

### **Tax Rate Information**

FRE's provincial tax rate is 4% on income eligible for the federal small business deduction and 12% on all other income. In 2016, the company's taxable income was \$383,233, and the ending balance in the capital dividend account was \$17,500. FRE also had refundable dividend tax on hand (RDTOH) of \$5,000 and capital loss carryforwards of \$35,000 at the end of its 2016 taxation year. Assume that Gloria's personal provincial tax is equal to 50% of her federal tax.

### **Background Information on Gloria**

Gloria is currently paid a salary of \$20,000 per year by the company and takes dividends for the balance of her cash needs. In the 2015 and 2016 calendar years, FRE paid dividends to Gloria of \$84,000 and \$71,000, respectively. FRE declares and pays dividends each September. The 2017 dividends, if any, are yet to be determined. Gloria currently earns about \$80,000 annually in personal net rental income and interest on fixed-income securities.

Gloria does not have any ownership interest in any other corporations. She is 61 years old, is single, and has no dependents.

In 2017, Gloria had significant expenses for knee surgery performed in a private clinic. FRE paid the \$48,000 that was not covered by the company's employee health plan. Gloria will need surgery on the other knee in 2018, which will cost approximately the same amount.

FRE recently purchased a car for Gloria to use personally, which cost \$41,500, including taxes. As the payroll manager believes the car has a useful life of about 10 years and no residual value, 1/120th of the car's value, representing each month's benefit, is included on Gloria's T4.

### **Fish Street Property**

In 2002, Gloria purchased an apartment building on Fish Street in Prince Joel, for \$842,000. The land was included in the purchase price. The land was, and is, valued at 20% of the property's value. Capital improvements to date have been \$152,000, consisting of a large addition to the front entrance. At the end of 2016, the UCC of the building was \$627,842. Gloria wants to know the tax implications, both to herself and to FRE, of selling the property to the company for \$1 million in cash. The market value is \$1.4 million, but she wants to give the company a good price.

**APPENDIX V (continued)**  
**TAXATION – ADDITIONAL INFORMATION**

**2015 Ajax Property Sale**

In 2007, FRE purchased the land for the Ajax property for \$804,000. Interest of \$11,000 was capitalized on the land before the apartment building was built in the same tax year, at a cost of \$2.6 million. No improvements were made to the building after acquisition. In the taxation year ending September 30, 2015, the property was sold to a third party for net proceeds of \$2.4 million. At that time, the UCC was \$1,840,000. The agreement of purchase and sale allocated 60% of the value to the building and 40% to the land, resulting in the following capital gain and terminal loss:

	<u>Land</u>	<u>Building</u>	<u>Total</u>
Proceeds	\$ 960,000 40%	\$ 1,440,000 60%	\$ 2,400,000
Cost/UCC	804,000	1,840,000	
Capitalized interest	11,000	-	
	<u>815,000</u>	<u>1,840,000</u>	
Capital gain/(terminal loss)	\$ 145,000	\$ (400,000)	
Taxable capital gain added on T2 Schedule 1	\$ 72,500		
Terminal loss deducted on T2 Schedule 1		\$ 400,000	

In addition to questioning the treatment above, Judy discovered that FRE forgot to add back amortization on Schedule 1 of the tax return for 2015. The 2015 return was assessed by the CRA on August 17, 2016. Judy hopes she can correct both issues at once and wants to know how to do so.

**Stock Option Plan**

Management has proposed a stock option plan for key employees and is willing to change the terms if necessary. At the date the options are issued, the exercise price will be half of the fair value of the company's shares, divided by the number of outstanding shares. The fair value will be determined as 1.25 times the company's forecasted annual revenue for the subsequent year. Judy believes this is a reasonable valuation method, as it is commonly used for valuing private companies. When they leave the company, employees will forfeit their unexercised stock options.

**Welzer Property Exchange**

At the time the Dogwood building was exchanged, its UCC was \$1,345,829. Judy initially considered the Blain River property received to be a replacement property and, therefore, reported no income tax implications.



**APPENDIX V (continued)**  
**TAXATION – ADDITIONAL INFORMATION**

**Bates Foundation of America (BFA) Offer**

An offer to finance has been received from BFA. BFA is not a resident of Canada. It has a good reputation for philanthropy in the United States. The offer letter is as follows:

Ms. Gloria Ferguson:

September 10, 2017

BFA's board of trustees is intrigued by your innovative approach to social housing.

Here are our proposed terms, with an anticipated closing date of December 31, 2017.

*Amount and form of investment:*

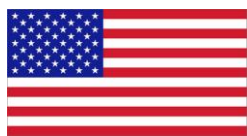
- The amount will be between \$9 million and \$10 million Canadian, subject to due diligence procedures.
- New common shares will be issued to BFA from the treasury.
- After the transaction, BFA will hold 45% of the common shares.

*Special clauses and conditions:*

A shareholders' agreement will be required, with the following mandatory clauses:

- There will be a maximum of five board seats, and BFA will appoint three of the five seats.
- BFA must approve all new share issues and any dividends.
- FRE must use environmentally safe products in all its operations.

Aguila Bates, President  
Bates Foundation of America  
Pittsburgh, PA, USA



*BFA is Proudly American*

**DAY 2 – MARKING GUIDE – ASSURANCE ROLE (INCLUDES COMMON)  
FERGUSON REAL ESTATE INC. (FRE)**

In the Assurance role, the candidate is expected to respond to the partner's request to perform analysis on the rent-to-own (RTO) and Ole Tower projects, to document the relevant independence rules and the potential threats involved with taking on these projects, and to draft the overall audit plan for the 2017 audit of Ferguson Real Estate Inc. (FRE), including procedures for the accounting issues identified. As part of the audit, the candidate is expected to address the significant financial reporting errors in the draft financial statements and consider the impact of the errors on the audit plan. Any control deficiencies should be discussed in a management letter. As requested by the partner, candidates are also expected to determine the reporting options available to meet the Declaration requirements from the Carter Apartment funding agreement and to discuss the procedures that could be carried out in relation to the Declaration, as well as any clarifications required.

**Memo to:** Audit Engagement Partner  
**From:** Assurance CPA  
**Subject:** FRE's 2017 Year-End Audit and Other Requests

**Assessment Opportunity #1 (Common)**

The candidate provides an analysis of the rent-to-own (RTO) program.

*The candidate demonstrates DEPTH in Core Management Accounting.*

I have been asked to provide an analysis of the rent-to-own (RTO) program. Specifically, I have been asked to look at these questions:

1. Is the program going to meet its objectives of 50% of the units being owned by the end of 2018, under the current requirements for 10% of the purchase price to be paid via credits?
2. Would it meet its goal of 50% if the requirements were reduced to 7.5%?

I have performed an analysis to determine the minimum number of months until the current tenants will have achieved the current minimum purchase credits to buy their unit, assuming they do not leave or are not late with rent.

Sell price (assumption):	\$130,000		
Credit percentage required:		10.0%	7.5%
Required credits:		\$13,000	\$9,750
Months to end of 2018:		16	16
<b>Unit</b>	<b>Credits to Date</b>	<b>Months to 10%</b>	<b>Months to 7.5%</b>
1	\$ 5,500	27.3	<b>15.5</b>
2	sold		
3	\$ 5,775	26.3	<b>14.5</b>
4	\$ 6,325	24.3	<b>12.5</b>
5	\$10,175	<b>10.3</b>	<b>(1.5)</b>
6	\$ 4,675	30.3	18.5
7	\$13,200	<b>(0.7)</b>	<b>(12.5)</b>
8	\$ 6,325	24.3	<b>12.5</b>
9	sold		
10	\$ 4,400	31.3	19.5
11	\$ 4,400	31.3	19.5
12	\$ 9,075	<b>14.3</b>	<b>2.5</b>

I have subtracted the purchase credits to date from the required purchase credits of 10% of \$130,000. I have divided this amount by \$275 to get the number of months until the tenant will be able to purchase. Since there are 16 months remaining until the end of 2018 (4 in 2017 and 12 in 2018), only tenants with a number less than 16 can possibly buy by the end of 2018. In the best-case scenario, this number is three using the 10% requirement, with the tenant in unit 7 already being able to buy, plus the two units already purchased, for a maximum of five units potentially purchased, versus the objective of 50% of 12, or six.

I say this is the best-case scenario because if tenants leave, are late with their rent, or do not want or cannot afford to buy, the purchase numbers will be even lower.

I have also performed a similar analysis for a possible change to a 7.5% purchase credit requirement. This looks a lot better, with the average current tenant only needing just over 10 months to meet the requirement in the best-case scenario and with seven tenants possibly being in the position to purchase, because their minimum months are less than 16. If they all purchased, that would result in 9 units of the 12 being purchased. The 50% objective would be met.

The calculations provided here have some underlying assumptions that should be questioned:

- Most significantly, the calculation assumes that tenants will make a purchase as soon as they have accumulated sufficient credits to do so. This may not be reasonable for several reasons:
  - I understand that two tenants have moved to other properties owned by FRE that are cheaper because there is no purchase credit portion of the lease. Perhaps these tenants could not afford the higher rents at Rudd Road.
  - The tenant in unit 7 has already met the 10% threshold but has not purchased a unit as of yet. It would be interesting to find out why the tenant has not yet purchased the unit, since it may affect the conclusions drawn above. For example, it is possible that the tenant could not obtain the financing necessary to close the purchase, since tenants do have to put up some of their own money in addition to the accumulated purchase credits.
- I noticed the latest appraisal increase of \$5,000 in two months equates to a 24% annualized increase in value, which is much higher than the annual average increase in values for all of Prince Joel of 1.27%, as provided by the property tax department of the City. If prices keep going up, purchases will require a larger amount of credits, which will reduce the number of units sold, even under the current assumptions.
- Further, with increasing prices, it is possible that the units will cost more than tenants expect or are willing to pay, reducing the number of tenants who will purchase their units.
- It is also possible that some tenants may pay late and forfeit some purchase credits. My calculations assume that every tenant will continue to pay on time and, therefore, will earn purchase credits at the fastest rate possible. If any tenants pay rent late and forfeit some purchase credits, the percentage of tenants able to make purchases will decrease.
- Finally, it is possible that tenants may never buy units if they perceive the sales price to be higher than fair value. Management's current estimate of the fair value of the entire building (10 units remaining) is \$1.2 million, or an average of \$120,000 per unit. The two sales that have occurred were at \$125,000 and \$130,000. If management's estimate of value is correct, the number of tenants purchasing their units may never increase, since they are being charged more than the fair value of the units.

For Assessment Opportunity #1, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to assess whether the program is going to meet its objective of 50% of the units being owned by the end of 2018 or attempts to assess whether it will meet its goal of 50% if the requirements are reduced to 7.5% from 10%.

**Competent** – The candidate assesses whether the program is going to meet its objective of 50% of the units being owned by the end of 2018 and assesses whether it will meet its goal of 50% if the requirements are reduced to 7.5% from 10%.

**Competent with distinction** – The candidate assesses whether the program is going to meet its objective of 50% of the units being owned by the end of 2018 and assesses whether it will meet its goal of 50% if the requirements are reduced to 7.5% from 10%. The candidate also questions the assumptions behind the calculations.

### **Assessment Opportunity #2 (Common)**

The candidate calculates what rent amount to charge in order to generate the target monthly net cash flow for the proposed luxury apartment venture (Ole Tower).

*The candidate demonstrates DEPTH in Core Management Accounting.*

I have performed the analysis on the proposed Ole Tower complex, based on the information provided and considering a 20-year horizon, as requested, while the mortgage is being repaid.

I have made certain key assumptions to carry out the analyses that follow:

- I have spread the annualized costs provided, on a monthly basis.
- The project instantly reaches full occupancy except for one unit, which may not be the case, and stays at 17 of 18 units occupied on average over 20 years. Since this is market rental, not bargain rental, the units will not necessarily fill up so easily.
- Rent increases will cover operating cost increases and no more.
- The desired \$10,000 per month cash flow is before tax.

You have asked me to determine the amount of rent that needs to be charged to generate a net cash flow of \$10,000 per month. My analysis is as follows, where I have determined the required amount of rent at 17/18 units occupied (which approximates 95% occupancy):

### Variable Costs

Incremental electricity	\$ 46.20
Incremental gas	<u>11.51</u>
	<u>57.71</u>

### Fixed Costs

Mortgage payments	18,049.00
Municipal taxes	10,604.58
Repairs and maintenance	2,333.33
Natural gas	4,600.00
Electricity	<u>2,010.00</u>
	<u>37,596.92</u>

Plus required profit	<u>10,000.00</u>
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Total margin required	<u>47,596.92</u>
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<u>Units Occupied</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>
Margin per unit	3,173.13	\$ 2,974.81	\$ 2,799.82	\$ 2,644.27
Plus variable costs	<u>57.71</u>	<u>57.71</u>	<u>57.71</u>	<u>57.71</u>
= Rent to charge	\$ 3,230.84	\$ 3,032.52	\$ 2,857.53	\$ 2,701.98

The conclusion is that approximately \$2,858 of rent generates \$10,000 per month of net cash flow during the 20 years in which there will be mortgage payments (assuming 17 of 18 units are occupied over the 20 years).

The following comments should be considered:

- Some costs may be missing from this calculation. For example, we know that superintendents are present at most buildings, but they have not been explicitly identified in the costs provided to us. Further research should be performed to confirm that costs are not missing from this analysis.

- As seen from the calculation above, the amount of rent to charge to achieve this profit goal varies significantly depending on occupancy. Further research should be performed to determine the level of occupancy that can be expected. This is primarily due to the extremely small variable costs relative to the high fixed costs of the property. As a result, occupancy is critical to this project's success. In addition, market sensitivity to rent changes must be examined very carefully.
- There would be financing costs during construction, which do not seem to have been considered.
- This assumes no bad debts or empty units for periods between tenants, which may not be realistic.
- Changes in mortgage interest rates before the 20-year period is over could significantly affect mortgage payments and cash flow, since it is very likely that interest rates will not be locked in for this extensive time period.
- Target annual cash flow can be achieved by increasing the down payment, but there are many other metrics FRE should consider before taking on this project, such as return on investment and net present value.

For Assessment Opportunity #2, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to calculate what rent amount to charge in order to generate the target monthly cash flow for the Ole Tower venture.

**Competent** – The candidate calculates what rent amount to charge in order to generate the target monthly cash flow for the Ole Tower venture.

**Competent with distinction** – The candidate calculates what rent amount to charge in order to generate the target monthly cash flow for the Ole Tower venture and completes some sensitivity analysis.

### **Assessment Opportunity #3 (Common)**

The candidate discusses the revenue recognition with respect to the build-operate-transfer (BOT) contract.

*The candidate demonstrates DEPTH in Core Financial Reporting.*

Gloria mentioned she was hopeful that the company could recognize revenue on the build-operate-transfer (BOT) contract at year end. This needs to be analyzed for the building and the operating cost recoveries.

## Building

HB 3400 – *Revenue* provides the following guidance:

*.06 In the case of rendering of services and long-term contracts, performance shall be determined using either the percentage of completion method or the completed contract method, whichever relates the revenue to the work accomplished. Such performance shall be regarded as having been achieved when reasonable assurance exists regarding the measurement of the consideration that will be derived from rendering the service or performing the long-term contract.*

*.07 Performance would be regarded as being achieved under paragraphs 3400.05-.06 when all of the following criteria have been met:*

- (a) persuasive evidence of an arrangement exists;*
- (b) delivery has occurred or services have been rendered; and*
- (c) the sellers' price to the buyer is fixed or determinable.*

There is persuasive evidence of an arrangement, namely the contract with the City, so criterion (a) is met.

For criterion (b), FRE has done everything it needs to do to earn the entire project price except for the tree planting and the honouring of a one-year warranty. The costs related to the tree planting are likely measurable (FRE expects them to be \$44,000). It will be more difficult to estimate the costs related to the warranty. FRE has estimated these at \$100,000, but it is harder to predict the type of work that will have to be done in the first year. In addition, because the property was built by Halloran and cracks have been found in other properties that company has built, there is a greater risk that FRE might encounter issues.

In addition, the property is still subject to a final inspection from the City, which it will not perform until closer to the closing date. Some fault or deficiency could appear for which rectification costs are not estimable at this point. There were 17 deficiencies in the first inspection, and it cost FRE \$74,300 to rectify these. An independent engineering firm has done the same final inspection that the City will carry out, and the property passed, but that is not a guarantee that FRE will pass the City's inspection. However, if any deficiencies are found in the final inspection, they can be rectified, as with the first inspection, and they presumably will not be significant in nature. This can be seen as a formality and not as a significant act that has not been completed.

For criterion (c), there is a very clear and precise contract with the City that specifies the amount to be paid, and there is no evidence that the City will be unable to make the payment on time, so the price is fixed or determinable.



In addition, HB 3400 states the following:

*.16 Revenue from service transactions and long-term contracts is usually recognized as the service or contract activity is performed, using either the percentage of completion method or the completed contract method.*

*.17 The percentage of completion method is used when performance consists of the execution of more than one act, and revenue would be recognized proportionately by reference to the performance of each act. Revenue recognized under this method would be determined on a rational and consistent basis such as on the basis of sales value, associated costs, extent of progress, or number of acts. For practical purposes, when services are provided by an indeterminate number of acts over a specific period of time, revenue would be recognized on a straight line basis over the period unless there is evidence that some other method better reflects the pattern of performance. The amount of work accomplished would be assessed by reference to measures of performance that are reasonably determinable and relate as directly as possible to the activities critical to the completion of the contract. (Measures of performance include output measures, such as units produced and project milestones, or input measures, such as labour hours or machine use.) Amounts billed are not an appropriate basis of measurement unless they reflect the work accomplished.*

*.18 The completed contract method would only be appropriate when performance consists of the execution of a single act or when the enterprise cannot reasonably estimate the extent of progress toward completion.*

Given that there are multiple acts related to the construction of the building (e.g., the various stages of construction of the building), the percentage-of-completion method is appropriate. Therefore, it is acceptable to recognize a portion of the revenue on the project, since the project meets the criteria for revenue recognition and the criteria for applying the percentage-of-completion method.

To account for this, costs incurred to date as a percentage of total estimated costs to complete the project can be used to estimate the percentage complete. Given that the expected net profit on the contract is 1.26%, then the total estimated costs to complete would be \$9,400,654 ( $\$9,520,614 \times (100\% - 1.26\%)$ ). A total of \$9,256,654 in costs have been incurred ( $\$9,400,654 - \$44,000$  tree planting – \$100,000 warranty costs). Therefore, the percentage complete is 98.47%, and \$9,374,949 of revenue ( $\$9,520,614 \times 98.47\%$ ) can be recognized. The inventory amount of \$9,256,654 would be recognized as cost of sales.

### Six-Month Operating Period Service Contract

For the operating cost part of the contract, there is also a strong argument to recognize revenue. Since it is the same contract, we note that

- (a) *persuasive evidence of an arrangement exists;*
- (b) *delivery has occurred or services have been rendered; and*
- (c) *the sellers' price to the buyer is fixed or determinable.*

In addition, collection is just as assured as for the building.

The services have been rendered, so the revenue can be recognized to the extent of qualifying operating losses incurred, as long as it is certain the company has complied with all the contractual terms. There will be no profit margin. It would be appropriate to record this income on a net basis (i.e., no revenue or expense) because FRE is an agent in this transaction (operating the project only temporarily on behalf of the City).

There may be an argument that this project has separately identifiable components (the build/transfer component and the operation component), and revenue should be allocated between the sale and the operating contract. However, there is not sufficient information in the excerpts provided from the contract to support such an analysis.

For Assessment Opportunity #3, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss the revenue recognition for the BOT contract.

**Competent** – The candidate provides a reasonable discussion of the revenue recognition for the BOT contract.

**Competent with distinction** – The candidate provides an in-depth discussion of the revenue recognition for the BOT contract.

**Assessment Opportunity #4 (Common)**

The candidate discusses the appropriate accounting treatment for the Welzer property exchange.

*The candidate demonstrates DEPTH in Core Financial Reporting.*

The Welzer property exchange is a non-monetary transaction because it primarily involves non-monetary items, after the exclusion of the (monetary) note payable. HB 3831 – *Non-monetary transactions* states:

.06 *An entity shall measure an asset exchanged or transferred in a non-monetary transaction at the more reliably measurable of the fair value of the asset given up and the fair value of the asset received, unless:*

- (a) the transaction lacks commercial substance;*
- (b) the transaction is an exchange of a product or property held for sale in the ordinary course of business for a product or property to be sold in the same line of business to facilitate sales to customers other than the parties to the exchange;*
- (c) neither the fair value of the asset received nor the fair value of the asset given up is reliably measurable; or*
- (d) the transaction is a non-monetary non-reciprocal transfer to owners to which paragraph 3831.14 applies.*

.11 *A non-monetary transaction has commercial substance when the entity's future cash flows are expected to change significantly as a result of the transaction. The entity's future cash flows are expected to change significantly when:*

- (a) the configuration of the future cash flows of the asset received differs significantly from the configuration of the cash flows of the asset given up (see paragraph 3831.12); or*
- (b) the entity-specific value of the asset received differs from the entity-specific value of the asset given up, and the difference is significant relative to the fair value of the assets exchanged.*

For criterion (a), the transaction has commercial substance since the two properties earn and incur completely different revenue and expense streams (i.e., different rents from different tenants, and completely different sets of costs specific to each building), and, therefore, the configurations of these cash flows differ significantly. It was noted that in order to align Blain River's rents with the rents at other FRE properties, they would need to be reduced by 10% to 12%; therefore, the cash flows are likely quite different from the cash flows previously earned by the Dogwood property. In addition, a \$200,000 payout due in five years' time is also a change to the cash flows expected previously.

Since the transaction was not done to facilitate sales to customers, criterion (b) does not apply. There are some reasonably reliable measures of asset values, in the form of an appraisal and a property tax assessment, so criterion (c) does not apply. Finally, it is not a transaction with the owners, so criterion (d) does not apply.

Therefore, the transaction should be measured at the more reliably measurable of the fair value of the asset given up and the fair value of the asset received. The key question is which measure is more reliable: the City's assessment value or the transferor's appraiser.

Supporting Welzer's appraiser/against the City's value:

- The city's value increase for the Dogwood property in 2017 is a composite of every property in the city and does not necessarily relate to the change in value of the property in question.
- It is an independent appraisal performed by an expert who spent time valuing the Blain River property, likely more time than the City's valuator did for Dogwood.
- The Blain River appraisal is only three weeks old, rather than a general 2017 value.

Against Welzer's appraisal/supporting the City's value:

- Although independent, the Blain River appraisal was paid for by Welzer, which may have pushed the appraiser to value high given the upcoming transfer. While the City's valuation of Dogwood may be biased to increase property taxes, the assessment is likely performed uniformly across all properties in the area.
- The City's valuation of Dogwood is likely more conservative, given that Welzer paid for the appraisal of Blain River while being aware that it was soon to be disposing of the property, so the valuation may have considered the impact of an upcoming sale. The value is to be measured at the day that the property is received, and for accounting purposes we should not consider the value changing based on future actions by the recipient of the property (i.e., the rent being dropped).

For now, we will assume Welzer's valuation of the property received is more reliable. The value received by FRE is, therefore, \$2.2 million. The transaction was recorded with the property coming in at the book value going out. It must be changed to the fair value being received, so a gain should be recorded.

To correct the entry made originally by FRE, the entry should simply be reversed.

CR	Blain River building		\$1,240,987
CR	Blain River land		677,392
DR	Building cost	\$1,684,254	
DR	Land cost	606,771	
CR	Building – accumulated amortization		572,646
DR	Note payable	200,000	

This assumes that the \$200,000 note payable was allocated to the land and building on the basis of their net book values, but we should confirm what the actual entry made was to ensure this reversing entry is correct.

In addition to the adjustment of the fair values, the \$200,000 note should be discounted, per HB 3856 – *Financial instruments*:

*.07 When a financial asset is originated or acquired or a financial liability is issued or assumed in an arm's length transaction, an entity shall measure it at its fair value adjusted by, in the case of a financial asset or financial liability that will not be measured subsequently at fair value, financing fees and transaction costs that are directly attributable to its origination, acquisition, issuance or assumption*

We have used 3% (FRE's weighted average borrowing rate is 2.83%, rounded up to reflect additional risk of unsecured debt) for five years, which yields a result of \$172,522.

The journal entry to record the transaction should have been as follows:

DR	Blain River building	\$1,400,000	
DR	Blain River land	800,000	
CR	Building cost		\$1,684,254
CR	Land cost		606,771
DR	Building – accumulated amortization	572,646	
CR	Note payable		200,000
DR	Note payable – discount	27,478	
CR	Gain on disposal of property		309,099

For Assessment Opportunity #4, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss the accounting treatment for the property exchange.

**Competent** – The candidate provides a reasonable discussion of the accounting treatment for the property exchange.

**Competent with distinction** – The candidate provides an in-depth discussion of the accounting treatment for the property exchange.

**Assessment Opportunity #5 (Common)**

The candidate discusses the potential impairment related to the real estate valuation issues.

*The candidate demonstrates DEPTH in Core Financial Reporting.*

Per HB 3063 – *Impairment of long-lived assets:*

*.09 A long-lived asset shall be tested for recoverability whenever events or changes in circumstances indicate that its carrying amount may not be recoverable.*

Events or changes in circumstances that have happened in the last year have indicated that the carrying amount of some company properties may not be recoverable. Each property must be looked at individually since they each have their own identifiable cash flows, as rental properties, per HB 3063:

*.12 For purposes of recognition and measurement of an impairment loss, a long-lived asset shall be grouped with other assets and liabilities to form an asset group at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities.*

I have assumed that the related mortgages do not have to be serviced by the buildings' rents, so I have not grouped them together for evaluation, per HB 3063:

*.14 An example of when a liability would be included in an asset group is a mortgage for which the building is the only source of cash flow to pay the liability. If other cash flows are available to pay the liability, the mortgage would not be grouped with the building for purposes of impairment.*

In addition, HB 3063 states:

*.04 An impairment loss shall be recognized when the carrying amount of a long-lived asset is not recoverable and exceeds its fair value.*

*.05 The carrying amount of a long-lived asset is not recoverable if the carrying amount exceeds the sum of the undiscounted cash flows expected to result from its use and eventual disposition. This assessment is based on the carrying amount of the asset at the date it is tested for recoverability, whether it is in use or under development.*

*.06 An impairment loss shall be measured as the amount by which the carrying amount of a long-lived asset exceeds its fair value. If an impairment loss is recognized, the adjusted carrying amount becomes the new cost basis. For a depreciable long-lived asset, the new cost basis shall be amortized in accordance with PROPERTY, PLANT AND EQUIPMENT, Section 3061. An impairment loss shall not be reversed if the fair value subsequently increases.*

There are three properties with more specific information that is of concern.

### **1. Largent Property**

The appeal of the property tax assessment for the Largent property and the external appraiser's report suggest the property should be valued lower (i.e., \$4.2 million) and is an indicator of impairment.

I do not have the information to calculate the sum of the undiscounted cash flows expected to result from the property's use and eventual disposition, in order to carry out a full cash flow recoverability test. However, since the building operates on a break-even basis, the cash flow recoverability would be expected to be equal to the appraised value of \$4.2 million, since the building could eventually be sold for this amount. Therefore, the carrying amount does not appear to be recoverable.

On the other hand, it could be argued that this is an ultra-conservative valuation that has the sole objective of reducing property tax costs. However, the drop in value is significant, and the valuation is equal to the internal value estimate used by the VP Rental Properties. In the absence of any higher valuation that is well-supported, the property will need to be written down to its fair value.

The value chosen should be the assessment made by the VP Rental Properties because that appears to be the best estimate of the fair value at this time since it is the most recent. We should get a specialist to provide another independent valuation on the property.

The amount of the write-down will be the difference between the carrying amount, which at August 31, 2017, was \$4,539,920, and the external appraiser's valuation of \$4,200,000. The entry to record the loss will be a \$339,920 debit to the impairment loss account and a credit to an asset impairment account. The charge for the impairment will be separately disclosed as a "loss on impairment of property, plant and equipment." The new cost basis will be amortized over the asset's estimated useful life going forward.

### **2. Tangletree Property**

The occupancy rate of the Tangletree property in Bluebell has decreased over the last 15 months. I understand that it is due to increased crime in the neighbourhood. This is a change in the extent the asset is used and is an indicator of impairment.

It could be argued that the increased crime may just be temporary and the government and police force will do something about it. Perhaps measures such as increased unit security and electronic surveillance will allay tenant fears and permit higher occupancy. It is possible that the vacancy rate can be reduced, but this might require a drastic drop in the rent. In any case, the future undiscounted cash flow of the building is likely affected.

We need to gather estimates of the future cash flows, both revenues and expenses of the property, to the end of its estimated useful life to determine recoverability. We cannot conclude yet on whether the carrying amount is recoverable. However, it should also be noted that the “rough estimate” prepared by the VP Rental Properties at August 31, 2017, was \$7.8 million, which is higher than the property’s net book value (\$7,743,999), so even if the carrying amount is determined to not be recoverable, it is possible a write-down may not be necessary, although the fair value will likely be affected by the increase in crime rates.

### 3. Atman Property

Five months after Halloran finished the Atman building, a large crack was found in its foundation. The property is still habitable and the occupancy is 100%. Andy told the VP Acquisitions, Construction and Maintenance not to investigate the crack, stating it is not a significant problem. However, this crack is an indicator of impairment.

We need to look at this property from a future cash flow perspective to determine whether the carrying amount is recoverable and a potential write-down is required. We would certainly need to gather further information, such as how much the repair of the crack will cost, before making any determination. At this point, the property is 100% occupied, so the future cash inflows have not yet changed. However, an analysis of the cost of fixing the crack and of ongoing costs to operate the property should be performed before we provide a conclusion. It should also be noted that the “rough estimate” prepared by the VP Rental Properties at August 31, 2017, was \$6.5 million, which is higher than the property’s net book value (\$6,400,800), so even if the carrying amount is determined to not be recoverable, it is possible a write-down may not be necessary, although the fair value will likely be affected by the crack in the foundation.

For Assessment Opportunity #5, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss the potential impairment issues.

**Competent** – The candidate provides a reasonable discussion of the potential impairment issues.

**Competent with distinction** – The candidate provides an in-depth discussion of the potential impairment issues.



**Assessment Opportunity #6 (Common)**

The candidate discusses the appropriate accounting treatment for the lawsuit.

*The candidate demonstrates DEPTH in Core Financial Reporting.*

FRE has been named as a defendant in a lawsuit by one of the tenants of its Parker property in Bluebell, who apparently slipped in the property's parking lot. Therefore, there is the potential that FRE has a liability for any amounts that may be payable as a result of the lawsuit. Accounting for these types of liabilities is covered through HB 3290 – *Contingencies*:

*.09 The amount of a contingent loss shall be accrued in the financial statements by a charge to income when both of the following conditions are met:*

- (a) it is likely that a future event will confirm that an asset had been impaired or a liability incurred at the date of the financial statements; and*
- (b) the amount of the loss can be reasonably estimated.*

Settlement of the lawsuit for \$400,000 would confirm whether or not a liability had been incurred at the date of the financial statements, so condition (a) and (b) could arguably be met if FRE chooses to settle between now and September 30. However, FRE has not yet chosen to settle, and FRE's lawyer has indicated that she is not in any position to comment on the likely outcome of the claim due to a lack of available information, so condition (a) would be considered undeterminable at this time. Condition (b) is also not currently met (we have the settlement and total lawsuit amounts of \$400,000 and \$900,000, but these are not representative of what the court ruling may actually be), and, therefore, no amount should be accrued in the financial statements at this point.

However, further information is expected within the next two weeks, which means that an accrual may be required on the September 30, 2017, financial statements should the amount of any payout become likely and estimable at that time.

As well, even without an accrual, there are disclosure requirements for the lawsuit as set out in HB 3290:

*.18 The existence of a contingent loss at the date of the financial statements shall be disclosed in notes to the financial statements when:*

- (a) the occurrence of the confirming future event is likely but the amount of the loss cannot be reasonably estimated;*
- (b) the occurrence of the confirming future event is likely and an accrual has been made but there exists an exposure to loss in excess of the amount accrued; or*
- (c) the occurrence of the confirming future event is not determinable.*

- .19 *At a minimum, the note disclosure shall include:*
- (a) *the nature of the contingency;*
  - (b) *an estimate of the amount of the contingent loss or a statement that such an estimate cannot be made; and*
  - (c) *any exposure to loss in excess of the amount accrued.*

Therefore, HB 3290.18(c) would suggest that disclosure is required, and HB 3290.19 sets out what information is required to be disclosed. This would include the nature of the lawsuit, an estimate of the loss (or, in this case, a statement that such an estimate cannot be made until further information is obtained), and the total potential exposure from the lawsuit.

The conditions above should be monitored at each reporting date to determine whether a liability should be recorded. It should be determined whether FRE has any liability insurance because it may be possible to offset the liability with the expected insurance proceeds.

For Assessment Opportunity #6, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss the accounting treatment for the lawsuit.

**Competent** – The candidate provides a reasonable discussion of the accounting treatment for the lawsuit.

**Competent with distinction** – The candidate provides an in-depth discussion of the accounting treatment for the lawsuit.

#### **Assessment Opportunity #7 (Common)**

The candidate discusses the potential conflict of interest issue regarding Andy's role with Halloran.

*The candidate demonstrates competence in Enabling skills.*

Andy was part of the senior management team at Halloran Construction Inc. (Halloran), and he maintains an active role on their board of directors.

Three years ago, a foundation crack in a property built by Halloran resulted in FRE selling the property at a significant loss. A large crack has just been found in the foundation of the Atman building, five months after completion. Andy told the VP Acquisitions, Construction and Maintenance not to investigate the crack, stating it is not a significant problem. The property is still habitable and occupancy is 100%. The Atman property was built by Halloran. However, since no investigation has occurred, we do not know for sure whether the crack in this building is indeed insignificant.

FRE then subcontracted the construction of the BOT project to Halloran. The initial inspection by the City was passed after 17 inspection deficiencies were corrected, at a cost of \$74,300. None of these were foundation-related, as far as we know, but the worry would be that further foundation issues may emerge on projects Halloran has done.

The question is, why is FRE still using Halloran if there have been issues on two previous projects? Is Andy influencing the decision to continue to use Halloran? Is he involved in any way in reviewing the proposals? If so, he would be in a conflict of interest.

It is possible that Halloran has been chosen based on Gloria's past relationship, but the relationship with Halloran should perhaps be evaluated by an independent advisor to help Gloria and FRE determine the best course of action for future construction projects. At a minimum, Gloria needs to be fully aware of the issues with Halloran's construction quality, and a transparent RFP process must be put in place for future projects. This is especially important because, in the case of self-build projects, "efficient construction contributes to FRE's success on the project."

For Assessment Opportunity #7, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate identifies that there is an ongoing issue with the quality of Halloran's work and questions why FRE continues to use Halloran, but does not question whether the reason FRE continues to do business with Halloran is due to Andy's influence.

**Competent** – The candidate discusses how Andy's sitting on Halloran's board may be inappropriately influencing the decisions being made at FRE with respect to contracts with Halloran (in spite of quality-of-work issues).

**Competent with distinction** – The candidate discusses how Andy's sitting on the Halloran board may be inappropriately influencing the decisions being made at FRE with respect to contracts with Halloran (in spite of quality-of-work issues) and recommends a course of action.

**Assessment Opportunity #8**

The candidate discusses the relevant independence rules and the potential threats involved with performing the additional work.

*The candidate demonstrates DEPTH in the Assurance role.*

Our firm has been engaged by FRE mainly to audit the financial statements for the year ending September 30, 2017. However, to help the board make some decisions at its next board meeting, our firm has also been asked to perform some analysis on two separate projects: the RTO program on Rudd Road and the luxury apartment project, Ole Tower. The partner has concluded that performing this additional work does not impair our independence for the audit engagement; however, we have been asked to document why in the file.

Auditors are required to identify any potential threats to independence. If threats are identified that are more than clearly insignificant, safeguards must be put in place to eliminate each threat or reduce the threat to an acceptable level. There are a number of types of threats to auditor independence that can be created when considering the provision of non-audit services, which include

- advocacy threat;
- self-interest threat; and
- self-review threat.

In assessing the threats to auditor independence, we noted the following:

- Self-review threat – The proposed service relates to the preparation of financial analysis that management and the board will use when assessing strategic decisions. The work will not be used as part of the financial statement preparation process; however, our analysis could affect management's decisions, which could then have an impact on the financial statements. Therefore, we will have to consider whether we think this will result in a self-review threat, either in fact or in appearance.
- Advocacy threat – This is not created because we are not advocating for the client.
- Self-interest threat – We will need to consider the size of the non-audit fee in relation to the audit fee and to the firm. It is unlikely that the size of the fee for this non-audit engagement would lead to a threat to our independence (the issue here is that if the non-audit service was material enough, it would cause the auditor to potentially not challenge management to a sufficient level as part of the audit).

If we conclude that either the self-review or the self-interest threat is not clearly insignificant, we will have to document a decision to accept or continue the particular engagement. The documentation should include the following information:

- (i) a description of the nature of the engagement;
- (ii) the threat identified;
- (iii) the safeguard or safeguards identified and applied to eliminate the threat or reduce it to an acceptable level; and

(iv) an explanation of how, in the member's or firm's professional judgment, the safeguards eliminate the threat or reduce it to an acceptable level.

There are also specific prohibited services, such as acting in a management capacity. In this situation, we will simply be providing management with information and will not make management decisions. Therefore, this additional work would not be considered a specific prohibited service.

For Assessment Opportunity #8 (Assurance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss the relevant independence rules and the potential threats involved with performing the additional work.

**Competent** – The candidate discusses the relevant independence rules and the potential threats involved with performing the additional work.

**Competent with distinction** – The candidate provides an in-depth discussion of the relevant independence rules and the potential threats involved with performing the additional work.

### Assessment Opportunity #9

The candidate discusses the appropriate accounting treatment for the RTO purchase credits, including any forfeited credits to date and any potential reporting implications.

*The candidate demonstrates DEPTH in the Assurance role.*

### RTO Purchase Credits Accounting

There is an accounting issue with respect to the forfeited purchase credits paid in by tenants of the Rudd Road apartments (\$275 paid by them each month as part of their rent is a credit toward purchasing their unit). After three consecutive months of unpaid rent, the accumulated purchase credits are applied to the overdue rent, and 50% of the remaining balance is forfeited. In addition, if the tenant moves out of the building, they forfeit 50% of the purchase credits.

I understand that all purchase credits ever contributed by tenants have been recorded in a deposit liability account. HB 1000 – *Financial statement concepts* applies:

*.28 Liabilities are obligations of an entity arising from past transactions or events, the settlement of which may result in the transfer or use of assets, provision of services or other yielding of economic benefits in the future.*

*.29 Liabilities have three essential characteristics:*

- (a) they embody a duty or responsibility to others that entails settlement by future transfer or use of assets, provision of services or other yielding of economic benefits, at a specified or determinable date, on occurrence of a specified event, or on demand;*
- (b) the duty or responsibility obligates the entity leaving it little or no discretion to avoid it; and*
- (c) the transaction or event obligating the entity has already occurred.*

*.30 Liabilities do not have to be legally enforceable provided that they otherwise meet the definition of liabilities; they can be based on equitable or constructive obligations. An equitable obligation is a duty based on ethical or moral considerations. A constructive obligation is one that can be inferred from the facts in a particular situation as opposed to a contractually based obligation.*

*.39 The recognition criteria are as follows:*

- (a) the item has an appropriate basis of measurement and a reasonable estimate can be made of the amount involved; and*
- (b) for items involving obtaining or giving up future economic benefits, it is probable that such benefits will be obtained or given up.*

The current treatment for the initial recording of the credits, therefore, is correct, since FRE has a responsibility to transfer the amount toward the purchase of the unit, apply it to overdue rent, or refund it to the renter (criterion (a)); there is no discretion to avoid it since it has been agreed upon by both parties (criterion (b)); and the transaction obligating FRE has occurred — the renters are a part of the RTO program (criterion (c)). In addition, the deposits have an appropriate basis of measurement, a reasonable estimate can be made of the amount involved, and it is probable that future economic benefits will be given up, thus meeting the recognition criteria.

However, a preliminary analysis shows that many of the purchase credits are no longer accounting liabilities because FRE's responsibility to transfer the amount is no longer applicable. There are three possible scenarios:

- Tenants use the credits to purchase a unit – At that point, the credits should be removed from the deposit liability account and recorded as revenue. The obligation from FRE has been satisfied at this point by applying the credits to the purchase price, and the liability should be derecognized.

- Tenants have three consecutive months of unpaid rent – In this case, the portion applied to overdue rent can be recorded as revenue. The obligation from FRE has been satisfied at this point because the tenants have triggered the use of the credits to be used against the overdue rent. The 50% of remaining credits forfeited can also be recorded as revenue; there is no continuing obligation from FRE. It is unclear what happens with the remaining credits; if they can continue to be accumulated toward the purchase of a unit, these should remain as a liability. If they are refunded to the tenant, then the liability will be derecognized when the payment is made.
- Tenants move out of the building – For this situation, the 50% of the credits that are forfeited can be recognized as revenue; there is no continuing obligation from FRE. The remaining 50% that are refunded will be derecognized as a liability upon payment to the tenant.

We know that only two original tenants have purchased, and there is only one additional current tenant who has been in the building since inception. Therefore, there are nine units for which the previous tenant or tenants have forfeited 50% of their purchase credits, so these purchase credits are no longer liabilities and have become revenue to the company. This amount could be quantified by taking the number of months between building construction and the move-out date of the prior resident for these nine units and multiplying that by \$275 and then by 50%.

Furthermore, there have been four tenants who have forfeited purchase credits due to three consecutive months of unpaid rent. Without additional information on current tenants with unpaid rent, it is not possible to quantify this amount.

### **Accounting Policy**

Going forward, the company needs a formal accounting policy for purchase credits paid month by month. The most conservative approach would be to record 100% of the credits as liabilities in the balance sheet. That is, for the scenarios in which tenants could forfeit credits, a liability would be established for both the portion that would be returned to the tenant or used against overdue rent *and* the portion that would become revenue to the company if the terms of the purchase condition are not met, since at the date of the payment, the company does not know what will happen. Purchase credits would then be recorded as revenue or derecognized as the trigger events occur.

A less conservative approach would be to look at past forfeiture trends and net off an allowance for future forfeitures into revenue at each reporting period.

Finally, it would be more appropriate to present the purchase credits as a deposit liability, rather than burying them in accounts payable and accruals.

### Prior Period Error

Based on the preceding analysis of the RTO purchase credit accounting issue, the prior financial statements of the company may have been materially misstated (2013 to 2016). Because the amount has been growing over time, this is most likely to be true for the 2016 financials, compared to prior years. This will have to be determined through detailed quantitative analysis.

Prior period errors must be corrected in accordance with HB 1506 – *Accounting changes*:

.27 *An entity shall correct material prior period errors retrospectively in the first set of financial statements completed after their discovery by:*

- (a) *restating the comparative amounts for the prior period(s) presented in which the error occurred; or*
- (b) *if the error occurred before the earliest prior period presented, restating the opening balances of assets, liabilities and equity for the earliest prior period presented.*

For Assessment Opportunity #9 (Assurance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss the appropriate accounting treatment of the RTO purchase credits.

**Competent** – The candidate has a reasonable discussion of the appropriate accounting treatment for the RTO purchase credits.

**Competent with distinction** – The candidate has an in-depth discussion of the appropriate accounting treatment for the RTO purchase credits.

### Assessment Opportunity #10

The candidate assesses the overall financial statement risk for the 2017 FRE audit.

*The candidate demonstrates DEPTH in the Assurance role.*

Last year, the overall financial statement risk was assessed at low. The partner has asked for this year's overall financial statement risk assessment.



Factors that increase this year's overall financial statement risk include the following:

- A new policy of allowing superintendents to accept cash for rent was implemented in January 2017, resulting in increased risk of fraud since cash can easily be stolen. We need to inquire as to the controls over cash to determine if the relevant controls will offset the increased risk of material misstatement.
- A new controller, Judy, was hired this year, who does not appear to have an accounting designation. She might not have the financial reporting expertise to handle some of the more complicated accounting transactions and has already admitted to being uncertain about some of the accounting treatments, which increases the risk of error.
- We have found financial reporting errors (e.g., RTO purchase credits); therefore, other errors may exist in the financial statements.
- A potential new investor, the Bates Foundation, as well as two new non-bank lenders, will be making decisions based on the year-end financial statements. This may make management more biased toward manipulating financial statements.
- There has been reduced involvement by Gloria because she works less at FRE and spends more time on charity boards. We do not know what role she played in the management controls. If she was a big part of the controls at FRE, then risk will increase now that she does less.
- The BOT project contract is complex. In addition, some recent transactions require the use of estimates (e.g., lawsuits, impairment), which, by nature, are more susceptible to error. This increases risk since there may be errors in the financial statements.
- FRE is more debt leveraged this year than in the prior year, largely because of the BOT project. Financial ratios are also generally worse compared to the prior year. This increases risk since management may have incentive to manipulate the financial statements to make them look better.
- Internal control issues have been identified that may result in inappropriate or fraudulent activity and the misappropriation of assets.
- There appears to be a conflict of interest with the COO of FRE sitting on the board of Halloran, a construction contractor of FRE. More than one of the buildings constructed by Halloran has had a crack or other deficiencies, yet FRE continues to use Halloran. There is risk of fraud, or at least the risk that other buildings may have unidentified cracks, leading to valuation errors in the financial statements.

Factors that decrease this year's overall financial statement risk include the following:

- No errors were found in the prior year, which reduces risk because FRE likely has a good system in place to detect potential errors.
- Key staff have knowledge and expertise in real estate and low-rent housing, which reduces risk because they would more easily be able to detect any potential errors.
- The company does not want to maximize earnings (its purpose is to make a small return), decreasing the incentive to manipulate the financial statements. However, there is a risk that a small profit would become a loss if unpredictable events were to occur.

- The lenders may be more interested in property values than in overall financial results, again decreasing the risk that management will want to manipulate the financial statements.

Overall, financial statement risk is assessed as moderate due to these factors.

For Assessment Opportunity #10 (Assurance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to perform an overall financial statement risk assessment.

**Competent** – The candidate performs a reasonable overall financial statement risk assessment and concludes on the risk level.

**Competent with distinction** – The candidate performs an in-depth overall financial statement risk assessment and concludes on the risk level.

#### **Assessment Opportunity #11**

The candidate discusses materiality for the 2017 FRE audit.

*The candidate demonstrates DEPTH in the Assurance role.*

CAS 320, *Materiality in Planning and Performing an Audit*, provides guidelines for materiality and emphasizes the need for professional judgment.

When determining materiality, we should consider the users of the financial statements. The principal users of FRE's financial statements are the owner, Gloria, and the board of directors. FRE's current lenders would also be users of the financial statements. In addition, we are told that the Bates Foundation of America, a large U.S. foundation, has approached Gloria with an offer to invest in FRE. Lastly, financing discussions are also taking place with two new non-bank lenders, who will be making decisions based on the year-end statements.

Now that we have identified the principal users, we need to consider what the users will be most concerned with. While FRE is operated as a for-profit entity, it is not operated to generate traditional profit margins due to its partially philanthropic objectives. In fact, it does not operate at much higher than break-even (FRE targets a 3% pre-tax return on sales and a 3% return on equity). Therefore, a materiality calculated using net income as a benchmark is not appropriate.

Given that FRE is in the real estate industry, Gloria and the potential investor would likely be more concerned with the value of the properties held by the company, and the current and potential lenders would be concerned with the company's ability to repay its debt (and using properties as collateral if repayment is not made), total assets is a much more appropriate basis to use to calculate materiality.

A typical range to use for calculating materiality on a benchmark such as total assets is 0.5% to 2%. I recommend using 1% of total assets for planning materiality. The company will be more sensitive to errors in this year's audit, given the fact that the Bates Foundation is considering an investment and there are two new non-bank lenders who will be deciding whether to finance the company based on the financial statements. I would, therefore, set planning materiality as follows:

Total assets per financial statements	\$52,439,081
Adjustments:	
BOT project deferred revenue	9,374,949
BOT project inventory expensed	(9,256,412)
Welzer property exchange increase in carrying value	291,621
Largent property impairment	339,920
Tangletree property impairment	?
Atman property impairment	<u>?</u>
Adjusted total assets	\$53,189,159
Percentage applied	1%
Planning materiality	\$531,892

Alternatively, because the assets are recorded at their net carrying value, you could consider using total revenue instead.

When performing the audit, we must consider performance materiality. Per paragraph 9 of CAS 320 – *Materiality*, “*performance materiality means the amount or amounts set by the auditor at less than materiality for the financial statements as a whole to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the financial statements as a whole.*”

Setting performance materiality at a fairly low level will reduce the likelihood of missing misstatements that in aggregate would be material to the users. Because the risk of errors is moderate, I suggest setting performance materiality to 70% of planning materiality, or \$372,324 (70% × \$531,892).

For Assessment Opportunity #11 (Assurance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts a discussion of materiality.

**Competent** – The candidate performs a reasonable discussion of materiality.

**Competent with distinction** – The candidate performs an in-depth discussion of materiality.

### Assessment Opportunity #12

The candidate discusses audit procedures for the relevant accounting issues.

*The candidate demonstrates DEPTH in the Assurance role.*

A number of accounting issues have arisen that will require audit procedures to deal with them.

### BOT Project

A significant risk relates to the clauses in the 322-page agreement that result in receivables from the City, liabilities to contractor and subcontractors, or other accounting impacts. This will require representations from management, a very detailed review of the agreement, and, if necessary, guidance as to clauses in the agreement that may have an impact but may need a specialist to explain.

The company has an accrued receivable for operating losses and costs to be covered by the City. We will need to ensure every amount is allowed by clauses in the contract and costs have actually been incurred (e.g., vouch to the related invoice). We may want written confirmation from the City as audit evidence.

For the revenue recognized (if they record the revenue), audit evidence will be needed to support these items:

1. We must review the consultant's final report, check his or her independence from FRE, and ask if any fixes costing money will be required in order to comply with the City's requirements. We should also inquire as to the likelihood of compliance in a few weeks, if they will answer this.
2. We should inquire and review whether the company has complied with all terms of the contract.

3. We should review the estimated percentage completion of the project by selecting a sample of costs incurred, vouching them to related invoices, and discussing the total estimated costs to complete with the manager of the project.
4. We should ensure the warranty cost is supportable, both in terms of valuation and completeness. Management will have to provide some back-up to support the \$100,000 estimate. Are there any comparable prior projects? Can the contractor help support it?
5. We will have to review the tree-planting quote as well.
6. We should ensure the City has the funds to pay for the unit, or the financing to cover it, at the end of November. This will have to be confirmed with the City or reviewed in council minutes.

In addition, to address the risk related to possible contingencies, we should also obtain evidence that the City will hold FRE harmless for building fire, earthquake, or other major losses, contractually or through the insurance arrangements throughout the period of construction and until handover. This should be in the contract or be confirmable in writing with the City.

### **Property Values/Impairment**

#### Largent

The current carrying value of the property is \$4,539,920; however, the company received a report from an external appraiser that showed a value of \$4.2 million. We will need to obtain the external appraiser's report. We will verify that the external appraiser valued the property at \$4.2 million, and then we will audit the assumptions used by the appraiser to determine the fair value of the property to establish whether they are reasonable. We should also evaluate whether the appraiser has the necessary competence, capabilities, and objectivity for us to be able to rely on their work.

#### Tangletree

The occupancy rate of the Tangletree property in Bluebell has decreased over the last 15 months due to increased crime in the neighbourhood. This may be an indication that the carrying amount exceeds its fair value. We first need to assess whether the carrying value is recoverable by reviewing an estimate of future cash flows provided by management and determining if the assumptions underlying the expected cash flows are reasonable. The current carrying value of the property is \$7,743,999, and the VP Rental Properties' assessment of the fair value at August 31, 2017, was \$7.8 million. We need to talk to the VP Rental Properties to determine how he came up with the assessment of \$7.8 million. We may need to obtain an independent fair value appraisal if the recoverable amount is determined to be lower than the carrying value and a reliable fair value needs to be determined.

### Atman

A large crack was found in the foundation of the Atman property; however, the property is still habitable and the occupancy is 100%. Therefore, we need to gather further information to determine the severity of the crack, such as how much the crack will cost to repair. This will help us determine whether the building's carrying value is recoverable. Similar to the Tangletree property, we should ensure we obtain an estimate of future cash flows from management and review the underlying assumptions to see if they are reasonable.

We should also find out if there are other problems in any other of the buildings built by Halloran, which seems to be constructing buildings with foundation cracks; there have been two to date. If there are other problems, this would indicate potential contingencies.

### **Welzer Property Exchange**

We should review the terms of the exchange agreement to confirm the amounts and details related to the \$200,000 note payable. We also need to confirm that Welzer Properties Inc. is not a related party. The next step would be to confirm that the transaction has commercial substance. As a result, we should obtain information on both the Blain River and Dogwood property rents and compare these two to each other. If we agree that the transaction had commercial substance, then we need to obtain the independent appraiser's assessment to confirm the value of \$2.2 million.

### **RTO Program**

For the first time in 2017, the company has sold units to tenants as part of its RTO program. We will need to audit the revenue recorded by reviewing the purchase documents and tracing the cash paid to the bank. We will need to ensure the cost of sales was recorded properly by verifying the company's apportionment of the original cost of the entire property to the unit cost of sales.

In terms of the purchase credits, we will need to quantify the amount that has been applied to overdue rent, returned to the tenant, or forfeited, to determine if the revenue recognized is correct. We have identified that there are nine potential units for which the previous tenants have forfeited 50% of their purchase credits. For these nine units, we need to look at the rental history to determine when the original tenant moved in and subsequently moved out in order to quantify the amount of purchase credits forfeited. In addition, four tenants have forfeited their purchase credits due to unpaid rents. We should inquire whether the company keeps a record of unpaid rents that we can review. If one does not exist, we could look at bank statements and the related cancelled cheques to determine the timing of payments and whether any tenants have enough unpaid rents to lose their purchase credits.

## Lawsuit

FRE has been in touch with its lawyers, and they stated that additional information regarding the details of the claim is anticipated within the next two weeks. Therefore, we should contact them to get an update on the status of the lawsuit. We should also look into whether the company has insurance that would cover this type of incident.

For Assessment Opportunity #12 (Assurance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate discusses specific audit procedures for some of the accounting issues.

**Competent** – The candidate discusses specific audit procedures for several of the accounting issues.

**Competent with distinction** – The candidate discusses specific audit procedures for most of the accounting issues.

## Assessment Opportunity #13

The candidate prepares a management letter discussing the control weaknesses identified, along with recommendations to improve these.

*The candidate demonstrates DEPTH in the Assurance role.*

I have noted the following weaknesses in FRE's operations:

### Delay in Depositing Cash

**Weakness:** The superintendents hold onto the funds until they have time to deposit them, which can sometimes be months, since they are typically pretty busy.

**Implication:** The longer the funds go without being deposited, the greater the chance they are lost or stolen.

**Recommendation:** The superintendents should be required to deposit the funds on a regular basis, ideally weekly.

**No Reconciliations of Collections**

Weakness: Because of the delay between the collection and deposit of cash payments, the property managers do not bother trying to reconcile the monthly rent due to the payments collected because they never match.

Implication: Without performing a reconciliation, it is possible that not all rent was collected for the month and it would not be detected. In addition, the superintendents could be stealing some of the cash payments, which would also not be detected.

Recommendation: A monthly reconciliation between all rents due and rents received should be performed. In addition, the reconciliations should be performed by someone else because there is currently a lack of segregation of duties between the collection and depositing of cash rent payments.

**No Backup for Vandalism Repairs**

Weakness: The superintendents cover all of the costs related to vandalism repairs and then send an email to their property manager with the amount they are owed. The property manager makes sure they are reimbursed on their next paycheque.

Implication: It does not appear that the property managers ask for any support related to the vandalism repairs. As a result, the superintendents could be inflating the costs and pocketing the difference.

Recommendation: The property managers should require the superintendents to submit receipts and invoices to support all of the costs they are asking to be reimbursed for.

**No Supervision of Superintendents**

Weakness: There appears to be a lack of supervision with regard to the superintendents. For example, for more complicated jobs, superintendents have the authority to hire whomever they feel necessary to do the work.

Implication: The superintendents could be hiring their friends who are not licensed, which may result in poor workmanship, or they could be making side deals with the contractors and getting kickbacks.

Recommendation: The property managers should put in place controls to supervise the superintendents' actions a little more, such as limiting contractors to an approved list of vendors who are licensed and can be trusted.



### Tracking of RTO Purchase Credits Forfeited

**Weakness:** Currently FRE has not accounted for the non-refundable portion of any credit forfeitures, and it is not clear whether they are doing a good job of tracking the forfeitures to date when a tenant either has unpaid rents or moves out.

**Implication:** Without accurate records of how many tenants have unpaid rents for three consecutive months or have moved out, FRE will not be able to properly account for the purchase credits. In addition, FRE might forget to take the forfeited credits away from the tenants and, as a result, lose out on that money.

**Recommendation:** FRE should implement a system for the forfeited purchase credits that tracks any unpaid rents and move-out dates to ensure that the appropriate amount of related purchase credits for these tenants is recovered and properly accounted for.

For Assessment Opportunity #13 (Assurance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate discusses some of the internal control weaknesses.

**Competent** – The candidate discusses several of the internal control weaknesses.

**Competent with distinction** – The candidate discusses most of the internal control weaknesses.

### Assessment Opportunity #14

The candidate discusses what reporting options are available to meet the Declaration requirements related to the Carter Apartment funding.

*The candidate demonstrates DEPTH in the Assurance role.*

The partner has asked what reporting options are available to meet the Carter Apartment “Declaration” requirements.

Our firm cannot just “declare” that FRE has met the funding agreement requirements. We can, however, provide an opinion as to whether FRE meets the standards in the agreement. The ministries seem to require some level of assurance, which is implied by the use of the word “declare” in the proposed report. Assuming that is the case, Section 5815 – *Auditor’s Reports on Compliance with Agreements, Statutes and Regulations* is a valid report option because the requirements of the grant are laid out in the agreement and we would be providing the ministries with an audit opinion on FRE’s compliance with them.

The report would be addressed to the funding ministries and would include (among other items) a reference to the annual funding agreement, a description of the responsibilities of management and the firm, and the criteria against which FRE is being evaluated. It would also include a conclusion with respect to compliance with the requirements. We will have to check with the funding ministries to ensure that our audit report will be acceptable, since an explicit “declaration” will not be provided. We will have to develop an overall strategy and approach, outlining procedures to be performed as well as ensuring that the information to complete those procedures is available from FRE. I have planned several procedures to assess whether the standards are being met (as discussed in the following section).

Another report we could consider is the Section 8600 – *Reviews of Compliance with Agreements and Regulations* report. It is similar to the Section 5815 report but provides a lower level of assurance. Instead of providing positive assurance, we would provide negative assurance that nothing has come to our attention to indicate that FRE is not in compliance with the agreement terms. It is unclear whether the ministries would consider this type of statement a declaration; therefore, we would need to check with them.

The last option to consider is a Section 9100 – *Reports on the Results of Applying Specified Auditing Procedures to Financial Information Other than Financial Statements* report. It is not clear whether the funding ministries would accept this type of report, since it provides no assurance. However, it would allow the ministries to provide input on the specific procedures that would be performed on the conditions. A Section 9100 would definitely be less risky for the firm, since the firm is not providing an opinion or attestation. It will be up to the funding ministries to determine whether they can accept such a report in lieu of a “Declaration.” Before any work is done, we should have the ministries agree to the type of report in writing.

For Assessment Opportunity #14 (Assurance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss what reporting options are available to meet the Declaration requirements related to the Carter Apartment funding.

**Competent** – The candidate discusses what reporting options are available to meet the Declaration requirements related to the Carter Apartment funding.

**Competent with distinction** – The candidate discusses in depth what reporting options are available to meet the Declaration requirements related to the Carter Apartment funding.

### Assessment Opportunity #15

The candidate discusses what procedures should be performed in relation to the Declaration and identifies areas in which definitions and other issues may require clarification from the funding ministries in order to perform the work.

*The candidate demonstrates DEPTH in the Assurance role.*

We will have to read and thoroughly understand the funding document.

### Use Restriction

We must inquire about the movement and use of the \$200,000 of government funding. Which bank account was it deposited in? Was it 100% used for the Carter project? We should vouch receipt of the \$200,000 from the provincial government to a bank account of the company. We should also vouch at least the \$200,000 flowing from that bank account to Carter project payments. There could be other funds entering and exiting the account, so that it is not possible to physically trace the funds to the payment. The payments should match invoices from third parties. The invoice from the third party should appear to be bona fide and should state the project name or address on it. We may need to get clarification on the allowable items that would qualify as funding the construction.

**Bid Requirements**

We need to obtain the construction budget the agreement refers to and focus our work on lines of more than \$100,000. We will need to see all the bid documents, including the request for proposal, the bid submissions purporting to come from at least three different third parties, and evidence that the lowest bidder was selected, as long as it met the technical requirements. This could get complex if there were, for example, three bidders but only two qualified technically, or there were six bidders and the second lowest was selected because the lowest did not meet the requirements. We may need to get clarification from the government on this situation, as well as whether there has to be three quotes that technically qualify so the lowest can be selected, or whether just three quotes is sufficient.

**Occupancy Calculation**

We should have the client prepare some kind of occupancy continuity schedule, by unit, stating the day-by-day occupancy of each unit from May 1, 2017, until December 31, 2017, supported by rental agreements. We will have to clarify the definition of occupancy beyond what is in the funding agreement. Suppose the tenant is not paying; does that qualify as occupying? We need to mathematically calculate the occupancy, and we need to test for only 80% of the units, not 100%, to save audit effort. Testing would be to signed lease agreements and related cash receipts, if necessary.

**Status First Nations Minimum**

The occupancy continuity schedule referred to above will have to contain notations on which occupants are Status First Nation members. There must be 15% of units occupied by Status First Nation members at all times. Presumably FRE will have documentation on file to support occupancy by Status First Nation members, such as a copy of the First Nations status card. The date of the status card will have to be earlier than the occupancy date. If FRE has no documentation, we will have to ask for it to be obtained or go and meet the lessee and ask to see their status card. We must clarify at which point in time the Status First Nation member requirement is for or whether it is for a period of time. We should obtain clarification from the government regarding a situation in which a Status First Nation member and an individual who is not a Status First Nation member sign a lease together, and whether that qualifies.

For Assessment Opportunity #15 (Assurance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate provides some specific procedures and/or clarifications that should be performed as part of the Declaration.

**Competent** – The candidate provides several specific procedures and/or clarifications that should be performed as part of the Declaration.

**Competent with distinction** – The candidate provides several specific procedures and clarifications that should be performed as part of the Declaration.

**DAY 2 – MARKING GUIDE – FINANCE ROLE  
FERGUSON REAL ESTATE INC. (FRE)**

In the Finance role, candidates are expected to analyze the townhouse rental proposal from both a quantitative and a qualitative perspective. Candidates are also asked to analyze FRE's debt capacity and its two new options for short-term debt financing. Next, candidates should analyze the two financing options under consideration for the tenants of the rent-to-own program. Candidates are then asked to step back and assess FRE's overall financial position and return. Next, candidates are expected to analyze the offer from the Bates Foundation that FRE has recently received from both a quantitative and a qualitative perspective. Finally, candidates are asked to estimate the weighted average cost of capital for FRE.

See Assurance Guide for the Common Assessment Opportunities #1 to #7.

**Assessment Opportunity #8**

The candidate quantitatively analyzes the townhouse rental proposal.

*The candidate demonstrates DEPTH in the Finance role.*

I have prepared a townhouse project financial analysis.

The total initial capital costs expected for this project are as follows:

Land	\$	390,000
Land preparation		274,000
Engineering studies*		62,000
Architect fees		48,500
Parking lot		140,000
Construction costs (20 units @ \$147,000)		2,940,000
 Total Initial Capital Costs	 \$	 3,854,500

\* Excludes sunk costs (irrelevant) of \$44,000

The estimated monthly net cash flow per unit is as follows:

Monthly rent per unit	\$	1,380
Maintenance		(195)
Lawn, garden & snow		(100)
Vandalism repairs		(85)
Net unit revenue	<u>\$</u>	<u>1,000</u>

The present value calculations (using a 40 year/90% conservative scenario and also using a 50 year/95% optimistic scenario) are as follows:

Present value calculations	Scenario 1	Scenario 2	
<i>Assumptions:</i>			
Useful life	40	50	
Occupancy	90%	95%	
Initial Capital Costs (above)	(3,854,500)	(3,854,500)	<b>A</b>
Net annual unit cash flows	216,000	228,000	
Annual property taxes (2.21%)	(76,687)	(76,687)	
Net annual cash flows	139,313	151,313	
Present value factor	23.11	25.73	
PV of annual cash flows	3,219,523	3,893,283	<b>B</b>
Paving (Years 15, 30 and 45)	(68,000)	(68,000)	
PV factor - 15 years	0.6419	0.6419	
PV factor - 30 years	0.4120	0.4120	
PV factor - 45 years	NA	0.2644	
PV of paving	(71,662)	(89,644)	<b>C</b>
Land sale at end	628,471	708,093	
PV factor	0.3066	0.2281	
PV of land sale	192,662	161,521	<b>D</b>
NPV for project (A+B+C+D)	(513,976)	110,661	

I conclude that the project has a net present value of between negative \$514,000 and positive \$111,000 using a discount rate of 3% and depending on the assumptions. Note that if a higher discount rate is used (reflecting the riskiness of the underlying cash flows), the NPV for this project would almost certainly be negative. With additional time, I could calculate other combinations of assumptions, such as higher occupancy and shorter useful life, or lower occupancy and longer useful life. Other variables could also be modified, such as the monthly rents, the discount rate, and the land/building sales value at the end of the project.

For Assessment Opportunity #8 (Finance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to complete a net present value for the townhouse project, but the calculations contain significant errors or omissions.

**Competent** – The candidate calculates a reasonable net present value for the townhouse project.

**Competent with distinction** – The candidate calculates a reasonable net present value for the townhouse project, with no significant errors or omissions, and performs a sensitivity analysis.

#### **Assessment Opportunity #9**

The candidate analyzes the qualitative aspects and the underlying assumptions of the townhouse rental proposal.

*The candidate demonstrates DEPTH in the Finance role.*

There are a number of qualitative considerations surrounding this project:

- This project is not consistent with the company's mission statement, which only contemplates apartment buildings.
- The company does not have experience building and operating townhouses, and this dynamic is a little different than that of apartment rentals.
- The Tangletree neighbourhood has a high crime rate, which has resulted in a low occupancy rate for FRE's Tangletree apartment building. Is the company sure it wants to build townhouses there?
- The leaking oil tanks are a concern and may be an indication of a larger problem. This should be researched more thoroughly before FRE commits to this piece of land, and FRE should request indemnifications from the current owners.

I would also question a number of the assumptions used in the quantitative analysis. For example:

- Occupancy – Is 95% occupancy realistic? There will be at least a few units empty between leases. It is also possible that the occupancy rate could be well below 90%, and this should be considered within the analysis, perhaps with additional sensitivity analysis.



- Construction costs – I question the unit construction cost estimates, given that the architect has not finished the design. These costs could vary significantly and could have a substantial impact on the profitability of the project. A final decision on this project should not be made until more certainty can be gained on these significant costs.
- Rent – The estimated rent charged should be analyzed carefully versus the market and comparable properties to see if it helps the disadvantaged, in line with the company's objectives.
- Land value increase – The land increase in value at 1.2% per year seems fairly conservative versus historic Canadian city land price increases. On the other hand, we have noted that the city is in decline and, therefore, any increase is inconsistent with the prediction of declining or stagnant property values.
- Maintenance costs – Maintenance costs may increase significantly over the life of the project, rather than being flat as we have assumed in our analysis.
- Leaking oil tanks – It is possible that the leaking oil tanks will cause a bigger financial impact than estimated in the land preparation amount of \$274,000. Is the \$274,000 an actual firm estimate from a remediation contractor?
- Useful life – The useful life may be well over 50 years since there are hundreds of thousands of homes and other buildings in Canada being used that are older than that. Our analysis above has assumed that the buildings (excluding land) will have no value at the end of the estimated useful life (40 or 50 years).
- Demolition costs – Presumably, there would be a demolition cost at the end of the useful life, which should be included in the above analysis.
- Discount rate – The net present value has been determined using the company's 3% desired pre-tax return. This is the company's hurdle rate of return, although it is unrealistically low relative to the risky future results and cash flows of the project, which demand a higher discount rate. A low discount rate will always give a higher NPV for projects than those tested with a higher discount rate.
- Taxes – An after-tax analysis would include a tax shield on the property and income taxes on the land release capital gain. Taxes would also be applicable on the annual income earned by the project. All of these amounts could be significant and should be factored into the analysis.
- Inflation – I have not increased costs for inflation; however, one would think that rents would inflate by at least the same amount as inflation over the 40 to 50 years.
- Initial costs – I have assumed all initial costs to take place at time zero in the analysis, when in fact they will be spread out over a few months at a minimum.

## Conclusion

On balance, I suggest that FRE not proceed with the townhouse project. The quantitative analysis, using a very low discount rate, produces a very low net present value at best, compared with the initial costs, and the qualitative risks are substantial. As well, the assumptions used in the forecast add to the risk of an unsuccessful project.

For Assessment Opportunity #9 (Finance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate discusses the qualitative aspects of the project or the underlying assumptions.

**Competent** – The candidate discusses the qualitative aspects of the project and the underlying assumptions and provides an overall conclusion.

**Competent with distinction** – The candidate discusses the qualitative aspects of the project and the underlying assumptions and provides a conclusion. The candidate further questions the discount rate of 3% used in the analysis, understanding that the riskiness of the underlying cash flows would normally require a higher discount rate.

#### **Assessment Opportunity #10**

The candidate discusses FRE's debt capacity and the two options for debt financing.

*The candidate demonstrates DEPTH in the Finance role.*

The company has no existing, untapped debt capacity in terms of first mortgages, as detailed below, based on 70% of property values and 35% of vacant land.

Property listing	31/8/2017				Borrowing capacity	
City	Name	Net Book Value	Estimated Value	Mortgage	Max	X Value
Prince Joel	Rudd Rd (R-T-O)	\$ 982,800	\$ 1,200,000	\$ 756,000	70%	\$ 840,000
Prince Joel	Blain River	1,918,379	2,200,000	1,615,300	70%	1,540,000
Prince Joel	24 Burnt St	4,533,837	5,900,000	3,750,800	70%	4,130,000
Prince Joel	Carter	3,627,302	4,658,000	2,920,566	70%	3,260,600
Prince Joel	BOT	9,256,412	9,520,614	9,066,667	70%	6,664,430
Prince Joel	11 Calue St	454,283	500,000	151,500	35%	175,000
Bluebell	Lain Rd	642,522	650,000	196,950	35%	227,500
Bluebell	Orpington	7,417,580	8,000,000	5,025,000	70%	5,600,000
Bluebell	Tangletree	7,743,999	7,800,000	5,693,600	70%	5,460,000
Bluebell	Largent	4,539,920	4,200,000	2,583,000	70%	2,940,000
Bluebell	Atman	6,400,800	6,500,000	4,173,000	70%	4,550,000
Bluebell	Parker	2,604,844	3,100,000	1,925,100	70%	2,170,000
		\$ 50,122,678	\$ 54,228,614	\$ 37,857,483		\$ 37,557,530
					Actual debt	\$ 37,857,483
					Extra capacity	\$ (299,953)

I have analyzed the two unusual operating line of credit proposals below. Neither is necessary if the Bates Foundation of America (BFA) investment proceeds. There is also the possibility of financial institution second mortgages, although this would make the company highly leveraged.

### **Thedco Ventures Inc. Proposal**

#### Pro

- No administration fees.
- Lower interest rate for the first two years.
- Will finance vacant land at 50% of appraised value, up to two pieces of land for a maximum of \$400,000 with a first charge on the land, in addition to the facility, but will the company be doing a lot of land transactions going forward?
- No second mortgages on any properties, which means additional debt capacity from another lender, if necessary, via second mortgages.

Con

- Cancellable annually by the bank, which could result in a need for new financing. This might be hard to obtain if the financing is cancelled (i.e., the financing might be cancelled due to FRE being in a poor financial situation, which would be a very bad time to attempt to obtain new financing).
- \$800,000 personal guarantee by Gloria, which should be avoided if possible.
- Rather high \$130,000 set-up charge (6.5% of the overall amount).
- Legal fees will be passed through to FRE. We do not know how much these would be, but given the agreement details (such as appraisals on two pieces of vacant land), they could be substantial.
- Additional reporting requirements (quarterly reviewed statements).

**Kanada Bank Proposal**Pro

- Lower interest rate over five years.
- Not cancellable unless there is mortgage default.
- No set-up charge.
- Option to fix interest rate after year two at 4%, but it is not clear whether this will be favourable or not; it will depend on the prime rate at the time.
- \$200,000 higher principal.
- No legal fees noted.

Con

- Second mortgages on all properties, reducing financing available on them.
- \$40,000 annual renewal fee.
- No extra land financing like there is with the Thedco offer.
- Line is lost if the company defaults on any mortgages (need to find out what the definition of default is; it should not be one missed payment).

**Quantitative Analysis**

I have analyzed interest and fees paid on a common \$2 million amount, assuming the prime rate is the same for both institutions. The Thedco loan is cheaper in the last four years, while the Kanada loan is cheaper in the first year. Overall, the Thedco line of credit is cheaper in total over the five years, but the amount is not very different.

		Years	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u>
<b>Thedco Ventures Inc.</b>		rate v prime	2%	2%	2.60%	2.60%	2.60%	
(max \$2million)	\$2,000,000	interest	\$40,000	40,000	52,000	52,000	52,000	
		Set-up fees	\$130,000					\$366,000
		Years	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u>
<b>Kanada Bank</b>		rate v prime	2.25%	2.25%	2.25%	2.25%	2.25%	
(max \$2.2 million)	\$2,000,000	interest	\$45,000	45,000	45,000	45,000	45,000	\$425,000
		Renewal fees	\$40,000	40,000	40,000	40,000	40,000	
		<b>Differential</b>	<b>\$85,000</b>	<b>(45,000)</b>	<b>(33,000)</b>	<b>(33,000)</b>	<b>(33,000)</b>	<b>\$(59,000)</b>

The difference would be even smaller if we discounted the interest payments back to Year 0 at an appropriate, consistent discount rate (such as the 3% hurdle rate used by FRE).

### Other Notes

The current prime rate is 2%, which means that either of these two loans will have an effective interest rate that is higher than the 3% required rate of return on FRE's investments. Although this is caused by the low rental payments charged to tenants, this "negative leverage" is detrimental to FRE's capacity to supply affordable housing on a sustainable basis.

### Recommendation

It is hard to compare the proposals because they are different in a number of aspects. However, the personal guarantee requirement and the cancellable feature of the Thedco loan may be the most important clauses. It seems that Gloria does not want to put very much new money into the company, which is why outside money is being sought. A personal guarantee is akin to asking her for money in some respects. Although the no-second-mortgage clause of the Thedco offer is very attractive, unless Thedco is willing to drop the personal guarantee and the cancellable feature, the Kanada Bank offer appears to be the best, with lower interest rates and a higher ceiling.

For Assessment Opportunity #10 (Finance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate calculates the borrowing capacity of FRE or discusses the advantages and disadvantages of the two financing options.

**Competent** – The candidate calculates the borrowing capacity of FRE and discusses the advantages and disadvantages of the two financing options, clearly supporting a conclusion.

**Competent with distinction** – The candidate calculates the borrowing capacity of FRE and thoroughly discusses the advantages and disadvantages of the two financing options, clearly supporting a conclusion. The candidate further understands the implications of the Kanada option with respect to second mortgages.

### Assessment Opportunity #11

The candidate discusses the two tenant ownership financing options.

*The candidate demonstrates DEPTH in the Finance role.*

### Guarantee Option

The guarantee option will likely mean that tenants could get the required financing with third-party financial institutions, with a large and reasonably creditworthy corporation providing the guarantee. In addition, it could be accomplished with minimal work and documentation, such work likely being covered by the set-up fee. Unless a guarantee is called, this option has no cash requirement for FRE.

However, there are significant drawbacks for the tenant and for FRE:

- The tenant may not be able to afford the set-up fee.
- Some tenants who are very poor credit risks will likely get loans. FRE will be on the hook for these loans for 25 years or more — a long time, albeit declining over time. There may also be some legal costs. The company will have more financial stress, and this may affect its ability to obtain mortgages and other financing.

- The lender will likely just call the guarantee in a failure-to-pay situation, rather than going through the costly and slow steps of realizing on the foreclosed security. In this case, FRE will have recourse against the former tenant, but FRE cannot legally seize the property. However, keeping in mind FRE's philanthropic mission, the company will have a lot of difficulty legally pressuring the tenant due to the traditional kindness and social responsibility ethos at FRE.
- If the economy experiences a downturn, FRE may have to come up with the money to pay out a lot of guarantees, and it is not clear where that money would come from, unless FRE accepts the BFA investment or takes on significant new financing. These amounts would be hard to predict.
- Unless there is a guarantee fee (which lower-income tenants may not be able to afford), FRE will not be getting much benefit from this very long-term risk, except perhaps from the home sale.

In terms of improvements to this option, the period of the guarantee should probably be capped, perhaps between two and five years or the term of the first mortgage, but not 25 to 30 years. Consideration should be given to charging the tenant at least a small guarantee fee, since the guarantee seems to be worth about 5% per annum. The company should ensure there is life insurance on the borrowers, with the proceeds able to pay off the loan in the case of the death of the mortgagee. FRE should also make sure that it is registered on the title of the property and will be second in line using the real property of the tenant as security.

### **Direct Financing Option**

Direct financing means FRE can budget and forecast the amount it will spend, which is not the case with guarantees.

In terms of improvements to this set-up, I believe a down payment of 5% is insufficient. In a property market that may actually decline, based on forecasts, the mortgage could even go "under water."

The direct financing option ignores an important reality. All properties have loans against them. The lender will presumably require the repayment of the loan when units are sold to tenants, so FRE will have to plan a significant cash outflow upon the sale of the unit to the tenant. Financing will be needed for this, but there is no security for it, since the property is owned by the tenant. This will financially squeeze FRE unless it receives ample money (for example, through the BFA investment).

Cash flows would be significantly affected under this option, meaning that FRE would have less cash available to support its other projects, thereby affecting its ability to meet its mission.

The interest rate FRE plans to charge is generously low, at about half the true risk-adjusted market rate, but consistent with (actually slightly above) the general rate of return that Gloria desires. This effectively means that the company is giving a 5% interest rate gift subsidy to the tenants, similar to the cheap rents provided. FRE would have to obtain funding for this amount.

If a tenant cannot pay or stops paying, the company will have a lot of difficulty foreclosing. The traditional kindness and social responsibility ethos at FRE will make it hard for it to seize properties, since that could put the former tenant out on the street. FRE also has no experience in the financing industry.

In terms of further improvements to this option, the company should ensure there is life insurance on the borrowers, with the proceeds able to pay off the loan in the case of the death of the mortgagee.

### **Other Options**

FRE should have discussions with various levels of governments (municipal, provincial, and federal) to see if they could help FRE with tenant financing in some way.

Financial counselling may be of benefit to tenants. The company could also hire specialists to offer financial seminars.

### **Recommendation**

Both of these tenant financing options generate a level of risk that could, down the road, be detrimental to FRE's ability to provide affordable housing on a sustainable basis. This activity is outside of its core business, and the clientele it is reaching out to are risky. If the company does decide to get into financing or guaranteeing loans, the company should strictly limit the amount of financing it provides; say, to a cap of \$1 million. Given the two options discussed and the lack of experience FRE has in dealing with these types of financing, FRE should choose the guarantee option, implementing the changes that I have suggested.

For Assessment Opportunity #11 (Finance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss the two tenant financing options, but the analysis is superficial.

**Competent** – The candidate discusses the two tenant financing options and either recommends an option or concludes that both options are too risky for FRE.

**Competent with distinction** – The candidate discusses the two tenant financing options and recommends an option. The candidate further provides suggestions on improving the recommended option.



**Assessment Opportunity #12**

The candidate evaluates the organization's overall financial position and return.

*The candidate demonstrates DEPTH in the Finance role.*

As requested, I have evaluated FRE's overall financial position and return versus its objectives.

It could be argued that the business will do reasonably well whether the economy is strong or weak. A strong economy will result in fewer potential tenants and greater property value increases. A weak economy will mean more potential tenants, some payment problems with tenants, and lower property value increases.

I have performed the following financial statement analysis, based on the August 31, 2017, interim financials:

	<b>August 31, 2017</b>	<b>September 30, 2016</b>
Current ratio <sup>1</sup>	0.92:1	0.25:1
Working capital <sup>2</sup>	(\$1,008,860)	(\$1,802,467)
Pre-tax income/revenues <sup>3</sup>	4.96%	4.01%
Pre-tax income/equity <sup>4</sup>	2.87%	2.61%
Debt-to-equity <sup>5</sup>	2.8:1	2.2:1
Debt-to-equity – no BOT loan <sup>6</sup>	2.2:1	2.2:1
Debt-to-equity (market equity) <sup>7</sup>	1.6:1	Unknown

<sup>1</sup> Current ratio = current assets ÷ current liabilities (before any adjustments)

<sup>2</sup> Working capital = current assets – current liabilities (before any adjustments)

<sup>3</sup> Adjusted pre-tax net income (see below) ÷ revenue

<sup>4</sup> Adjusted pre-tax net income ÷ total equity (after adjustments)

<sup>5</sup> Total liabilities ÷ total equity (after adjustments)

<sup>6</sup> Total liabilities (after removing BOT loan of \$9,066,667) ÷ total equity (after adjustments)

<sup>7</sup> Total liabilities (after removing BOT loan) ÷ total market equity adjusted only for the market value of properties in excess of cost (\$55,328,000 – \$50,485,691)

I have adjusted and annualized 2017 pre-tax income as follows:

Unadjusted pre-tax income per financial statements	\$ 283,154
Pro-rate for 12 months (add one month × 1/11)	25,741
Add: estimated BOT profit (1.26% × \$9,520,614)	120,202
Add: gain on Dogwood property transfer	309,099
Less: Largent property impairment	(339,920)
Adjusted annualized 2017 pre-tax income	\$ 398,276

Note that the above adjusted 2017 pre-tax income does not include any increase in property values for the year.

I have the following comments:

- The current ratio and working capital look poor before the adjustment for the BOT project to inventory. The huge current liability relates to the financing for the BOT project. The company will bill \$9.52 million shortly for the City project, and the liability will be paid off.
- The company's cash is sufficient to cover the accounts payable and the accruals. A large portion of the current liabilities will, in fact, not be paid back within 12 months, since they represent mortgages that will be simply renewed in the upcoming year. The ratio is, therefore, quite healthy as it is.
- The company earned just over the target 3% rate of return on sales that it desired in both fiscal 2017 and fiscal 2016. However, this ignores the changes in property values and the fact that the BOT project is a one-time event. A comparison to the rental property industry would contribute some additional information, but it is not available.
- As well, FRE earned a return on equity of 2.87% in 2017, which is slightly lower than its 3% target. In 2016, FRE earned a 2.61% return, which is also shy of its 3% target. As a comparison, the industry statistics indicate a return on equity of 10.6%, but it is difficult to compare FRE with the rental property industry as a whole due to FRE's philanthropic nature.
- The debt-to-equity ratio is high, particularly at the current time, with the BOT financing, but this is typical of real estate companies. I note that the rental property industry as a whole has a higher debt-to-equity ratio of 4.3 for 2017. The BFA offer (\$9 to \$10 million) would improve the debt-to-equity ratio by adding considerable equity.
- FRE is taking quite a bit of risk, and yet the overall objective is to make just a 3% rate of return. Normally, higher risk requires higher rates of return in finance, so there is an unresolvable problem here as long as 3% is the target.
- FRE should not be determining whether it is achieving the desired 3% rate of return on equity by taking 3% of its book value, since this is not the true equity in the company. It should use 3% of market value, which should be the adjusted book value. We have valued the company at approximately \$17.6 million (see below).
- FRE makes money in two ways: profits/cash flow and increases in property values. Comparing pre-tax income to the company's equity does not tell the whole story. If the company made 2.5% in pre-tax income and 2.5% in an increase in property values, then a 5% return exceeds the 3% objective. However, this could work the other way, since property values could decrease.
- There is some hidden value in FRE. Charging below-market rents reduces the value of properties, as measured by the current rental income. However, this is because of the company's philanthropic objectives.
- Two banks forecasting decreasing property prices for Bluebell and Prince Joel, which will hurt the company's ability to borrow due to the limitations of real estate borrowing, that being approximately 70% on properties and 35% on vacant land.
- The weighted average cost of the company's debt is currently 2.83%.

- Evaluating risky projects with the company's 3% desired rate of return distorts investment decisions because investments in future cash flows are almost always inherently risky.

For Assessment Opportunity #12 (Finance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to evaluate FRE's overall financial position and return, but the analysis is generic.

**Competent** – The candidate evaluates FRE's overall financial position and return and understands the unique nature of FRE's business.

**Competent with distinction** – The candidate evaluates FRE's overall financial position and return and understands the unique nature of FRE's business and that the BOT project has a substantial impact on FRE's ratios. The candidate understands that the market value of the properties should be used to evaluate returns.

### Assessment Opportunity #13

The candidate discusses the investment offer from the Bates Foundation of America from both a quantitative and a qualitative perspective.

*The candidate demonstrates DEPTH in the Finance role.*

I have been asked to evaluate the offer from the Bates Foundation of America (BFA), and will look at it from a quantitative and a qualitative perspective. An upfront question is, what would the money be used for? Is there a need for \$9 to \$10 million? What do the board and Gloria think? Certainly there are enough people who need housing help, if one considers other Canadian cities beyond Prince Joel and Bluebell, to spend all this money and more.

### Quantitative Analysis

A valuation of the company is the highest price the shares would fetch between informed parties acting without compulsion.

We first must choose the valuation method. The choice is between a going concern method, which values the organization based on capitalized future income or cash flows, and a tangible asset valuation method, which is basically an asset valuation less liabilities.

FRE is only marginally profitable, approximately 3% on the book value of its net assets, intentionally, so a going concern valuation will be very low. For example, if 2016 earnings are capitalized at, say, 20%, giving a multiplier of 5, the valuation is  $\$268,728 \times 5 = \$1.34$  million. On the other hand, the company's unadjusted book value is \$13.2 million at September 30, 2016, and most of the properties have internally estimated values in excess of book value, so the adjusted tangible asset value is even higher. Based on this preliminary assessment, the tangible asset valuation will be used because a higher value will result, versus a going concern valuation method. The tangible asset value should result in a value that more accurately reflects the fair market value of the net assets of FRE (the real estate).

In the following analysis, I have adjusted the real estate values to the internal value estimate from the August 31, 2017, property listing, instead of book value. Some values need to be questioned, particularly the Tangletree and Atman properties, but this can be done afterwards. I have also assumed that all other assets and liabilities approximate their fair values since I do not have any information to suggest otherwise. Given the nature of these other assets and liabilities (the working capital likely approximates fair value, and the loans appear to be carrying rates that approximate current market interest rates), this assumption is most likely quite reasonable.

Net book value per financial statements	\$ 13,472,092
Less: net book value of properties	(50,122,678)
Add: estimated fair value of properties	54,228,614
Estimated fair value of net assets at August 31, 2017	\$ 17,578,028

Note: No adjustments are needed for the Dogwood transfer, the BOT project, or the Largent impairment since these are already considered in the estimated values of the properties above.

My estimated valuation of the company at August 31, 2017, is, therefore, \$17.6 million.

FRE has been valued at approximately \$20 to \$22 million based on the BFA's offer, as outlined below:

Percentage of shares	45%	45%
Investment amount	\$ 9,000,000	\$ 10,000,000
Valuation of FRE	\$ 20,000,000	\$ 22,222,222

Assuming a \$10 million investment, the value of FRE immediately following the investment would actually be approximately \$27.6 million (\$17.6 million valuation from our analysis above plus the \$10 million in new shares as they are issued from treasury, according to the draft agreement). Therefore, the BFA investment is too low. FRE should give up approximately 36% of the shares for a \$10 million investment ( $10 \text{ million} \div 27.6 \text{ million}$ ).

## Qualitative Analysis

### Pros:

- The board of FRE would add additional members, which, depending on their skills and background, could be good for governance. FRE should request more details on the potential board members to ensure they would assist FRE in meeting its mission and vision.
- The agreement would bring a lot of cash and equity to the company, which could help FRE meet its mission and vision (by investing in additional projects and leveraging its investments for even more financing).
- FRE would have the option of paying down its loans, reducing interest costs, which would leave additional funds in the company to meet its mission and vision (although paying down debt would leave less money in the company for funding future projects).
- Because the objective of the company is not profit maximization, there are very few potential outside investors that have a unique perspective on philanthropy, like BFA does.
- This is the first-ever outside investment offer and suggests that FRE is on the right track with its mandate (an assumption, since Gloria owns 100% of the shares).
- This would mean that there would be no need for the short-term loans described earlier in this memo, both of which had some significant drawbacks.
- The investment would bring additional attention and press coverage to the company, which could further highlight the housing needs of certain individuals and could lead to additional housing initiatives.
- BFA apparently has a good reputation in the philanthropic world, although this should be checked to ensure that it is accurate.
- The investment would give the company a nest egg for various ventures and would allow the company to focus its efforts 100% on its mission and vision rather than on financing.
- The additional money would be welcome and may be needed, given the reduced government funding expected with various levels of government facing financial pressures.
- The investment would dramatically improve all of the company's balance sheet ratios and its financial position.
- Additional equity would mean additional debt capacity, perhaps even two times the amount invested (up to an additional \$20 million), coming from the 2:1 debt-to-equity ratio noted in the previous section.
- FRE would be able to grant financing or guarantees to more tenants who want to purchase, should it move into the tenant financing area.
- With all the cash available from BFA's investment, the planned luxury apartments might not be needed; they are not directly philanthropic and may become a distraction.
- The money could be used to replace aging properties or to do major preventive maintenance on existing properties.
- FRE would have the resources to expand, potentially into the U.S. market, and personnel to run U.S. operations could be hired.

Cons:

- Gloria will lose control of FRE with BFA nominating three of five board members. This is a huge drawback of this offer and perhaps can be negotiated.
- Gloria will lose remuneration flexibility due to the outside shareholder.
- Dividend approval will reduce flexibility for Gloria's remuneration.
- Equity funding is generally expensive, although in this case that may be less of an issue, given FRE's 3% return on equity objective.
- The controversial funding of genetically modified crops to help food shortages in an emerging-economy country could bring bad publicity to BFA, which could spill over to FRE.
- Gloria and the management team must decide if they really want to invest in U.S. housing initiatives, given that FRE's management has no U.S. experience or presence, since this is a requirement of the financing. FRE's management is also not familiar with the legal environment or housing laws in the U.S.
- FRE has no basis of comparison for the offer, and it should solicit other investment offers for comparison purposes, if possible.
- The company would likely no longer be a Canadian-controlled private corporation, which has a number of tax disadvantages, such as increased tax rates.
- It is possible that owners of businesses who sell to the organization at a discount, who know Gloria personally, would no longer be interested in donating to FRE through discounts once it joins forces with BFA.
- It is not clear how BFA would view the planned luxury apartments, since they are not directly philanthropic in nature.
- Possible retractions of the shares if there is no U.S. expansion would be a share note disclosure, which would look negative. The retraction would also lead to a very significant cash flow drain, and it is not clear if FRE would have the cash available at the time the retraction feature is triggered.
- The 180-day no-tenant-eviction clause may be a departure for FRE from its current policies and could lead to substantial changes in operations, which would have significant financial implications. More clarity is needed on this clause and how it would affect FRE moving forward.
- Similarly, the clause requiring the use of environmentally safe products in operations is not clear, and an analysis of its implications for FRE should be made from both an operational and a financial perspective.

**Conclusion**

I have analyzed the BFA offer carefully, but ultimately it comes down to what Gloria wants personally with this investment and whether there can be an agreement on valuation. Until BFA comes up with its final valuation of FRE and final terms, it is hard to evaluate the offer with certainty. FRE needs to seek legal advice. From the analysis above, I would suggest that FRE counter the offer and request the following two significant changes (there would also be others, but these two seem to be overriding in terms of moving forward with the agreement):

1. Reduce the number of board seats from three to two (out of five).
2. Reduce the percentage ownership to 36% (assuming a \$10 million investment).

For Assessment Opportunity #13 (Finance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate discusses the pros and cons of the BFA offer, but the analysis is superficial.

**Competent** – The candidate discusses the pros and cons of the BFA offer from both a qualitative and a quantitative perspective.

**Competent with distinction** – The candidate discusses the pros and cons of the BFA offer from both a qualitative and a quantitative perspective. The candidate identifies the significant changes that must be made before completing any agreement, from FRE's perspective.

#### Assessment Opportunity #14

The candidate calculates an appropriate weighted average cost of capital for FRE.

*The candidate demonstrates DEPTH in the Finance role.*

In order to estimate the weighted average cost of capital (WACC) for FRE, we must estimate the cost of equity and the cost of debt. We will use the capital asset pricing model as the basis for our estimate of the cost of equity, as requested.

Cost of Equity ( $R_e$ ) – based on the CAPM:

$$R_e = R_f + \beta(R_m - R_f) = 2\% + 0.8 \times (9\% - 2\%) = 7.6\%$$

Where:

- $R_e$  – cost of equity
- $R_f$  – risk-free rate (any reasonable assumption would suffice)
- $R_m$  – rate of return expected from the market as a whole (9%)
- $\beta$  – industry beta for rental property companies

The resulting cost of equity from the CAPM is 7.6%. Note that this is significantly higher than the return on equity objective at FRE, which has been stated as 3%. Using this rate as the cost of equity would produce an unreasonably low WACC. It may also be prudent to add risk premiums due to the small size of FRE (relative to other rental property companies). Assuming a size premium of a further 4%, the resulting cost of equity is 11.6%. A private company premium could also be considered.

#### Cost of Debt ( $R_d$ )

We know that the weighted average borrowing rate for FRE is 2.83% (see above). We do not know whether this rate is indicative of its current market rate, but given the rate and the low variability in the rates on its current mortgages (1.77% to 3.44%), it is likely close. As well, given the interest rates on the Thedco and Kanada loan proposals (approximately 4%) and the fact that these are not secured by specific properties of FRE, the 2.83% appears reasonable. We will, therefore, use this as a proxy for the cost of debt.

#### Market value of equity ( $MV_e$ )

The market value of the equity (net assets) of FRE has been estimated previously (see valuation analysis) at \$17,578,028. We are also told that the current capital structure of FRE approximates its target capital structure. Therefore, we will use this value as the market value of equity.

#### Market value of debt ( $MV_d$ )

The total book value of FRE's interest-bearing debt is \$38,057,483 (\$26,748,327 + \$11,309,156). From this amount we should deduct the redundant cash on the balance sheet (\$1,567,281), leaving us a book value for the net debt of \$36,490,202. We assume that this is close to the market value of the debt, given our analysis above.

#### Weighted average cost of capital (WACC)

$$\begin{aligned} \text{WACC} &= [MV_e \div (MV_e + MV_d) \times R_e] + [MV_d \div (MV_e + MV_d) \times (R_d \times (1 - t))] \\ &= [17.6 \div (17.6 + 36.5) \times 11.6\%] + [36.5 \div (17.6 + 36.5) \times (2.83\% - (1 - 15\%))] \\ &= 5.40\% \end{aligned}$$

Where:  $t$  – the estimated tax rate for FRE (any reasonable number would suffice)

Using these assumptions, the WACC for FRE is approximately 5.40%.

#### **Discussion**

The calculated WACC for FRE is almost double the 3% return that the entity attempts to achieve due to its philanthropic nature. However, the 5.4% is likely a more appropriate discount rate to use when valuing projects such as the townhouse project noted previously. This rate could also be used in an attempt to value FRE through a capitalized cash flow or income approach, but this rate would not compensate for the unusually low rents (below market values) charged by FRE.



For Assessment Opportunity #14 (Finance), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to calculate a weighted average cost of capital for FRE, but the calculations contain conceptual errors.

**Competent** – The candidate calculates a reasonable weighted average cost of capital for FRE, including a good understanding of the three components (cost of equity, cost of debt, and the weights for debt and equity).

**Competent with distinction** – The candidate calculates a reasonable weighted average cost of capital for FRE, including a good understanding of the three components (cost of equity, cost of debt, and the weights for debt and equity). The candidate further explains that it differs from the 3% return objective set by Gloria.

**DAY 2 – MARKING GUIDE – PERFORMANCE MANAGEMENT ROLE  
FERGUSON REAL ESTATE INC. (FRE)**

In the Performance Management role, the candidate is expected to identify risks to FRE and recommend ways to mitigate those risks. The candidate is also expected to do both a quantitative and a qualitative analysis of the proposal to outsource the maintenance function. Candidates are then asked to evaluate the organization's management incentive schemes at the various levels below vice-president and to suggest better metrics. Judy thinks that some of FRE's recent activities do not align with the company's mission, and she asks for thoughts on this. She also asks for comments on the current mission statement and recommendations on any improvements, with sufficient explanation and support. Candidates are then asked to consider what additional information the accounting team could provide that would help the board and management make better operational and strategic decisions. Finally, candidates are asked for their views on the company's governance structure and to provide recommendations for improvement.

See Assurance Guide for the Common Assessment Opportunities #1 to #7.

**To: Judy Kong, FRE's controller**  
**From: CPA – Senior Analyst**  
**Subject: Ferguson Real Estate Inc. (FRE)**

**Assessment Opportunity #8**

The candidate analyzes the risks facing the company and recommends risk mitigation options.

*The candidate demonstrates DEPTH in the Performance Management role.*

Here are the risks that I have identified and mitigation options for your consideration:

Risk: Low liquidity (current ratio at 0.92), which greatly reduces FRE's financing ability in the short term.

Mitigation: FRE should monitor cash levels closely to ensure there is sufficient working capital and use profits from projects like the build-operate-transfer (BOT) project to reduce mortgage levels. FRE should communicate with city officials to ensure payment of the BOT project is not delayed. This should include follow-up with the City to ensure there are no delays in final inspection and all necessary paperwork is ready for processing the final payment.

Risk: With possible interest rate increases forecast and most of FRE's mortgages having variable rates, there is a considerable risk that interest expense could climb significantly. This could have an impact on operations since FRE operates with a low profit margin.

Mitigation: There are seven mortgages up for renewal by the end of 2018. FRE should convert some of the mortgages to fixed rates or discuss the possibility of converting some mortgages to fixed rates sooner with the bank. FRE management should also continue to monitor the Bank of Canada interest rates in anticipation of future interest rate increases.

Risk: There is a possibility that FRE's unionized maintenance employees will go on strike like similar unions in nearby cities, particularly if the union discovers that FRE is considering outsourcing maintenance. A strike would have a negative impact on FRE's operations and reputation and could be very costly, depending on the length of the strike.

Mitigation: If FRE outsources the maintenance function quickly, the possibility of a strike is eliminated. Alternatively, FRE could continue to work on building strong union relations. Since there are only 11 unionized employees, management can work on building relationships with each union member and gain a good sense of their job satisfaction level.

Risk: Buildings that are very old will likely have more maintenance costs in the near future and may need significant capital reinvested to maintain them, which could put a strain on FRE's resources.

Mitigation: FRE should ensure it has a strong preventive maintenance program to avoid major renovations. Some renovations may be unavoidable, so FRE should conduct an assessment of the oldest buildings to get a sense of capital improvements required in the short term. In the longer term, FRE could also analyze whether it would make sense to sell old buildings and use the proceeds to purchase new buildings.

Risk: There has been an increase in neighbourhood crime at Tangletree, resulting in tenant safety issues and fewer tenants. There has also been an increase in vandalism, which could also lead to decreased occupancy. Given the slim profit margin FRE has, vacant apartments would have a significant impact on FRE's financial results.

Mitigation: FRE's management could lobby local politicians to preserve neighbourhoods and improve and maintain safety with a greater police presence. FRE could also encourage community policing and other solutions like neighbourhood watch. At a minimum, FRE should install security measures like cameras, alarms, and more lighting.

Risk: FRE has discovered a crack in the foundation of another building, which could result in another big loss such as the one FRE incurred three years ago.

Mitigation: Investigate the severity of the foundation crack and determine whether it needs immediate repair. Introduce more rigour in building inspections and build contingencies for exceptions into future construction contracts.

FRE should improve the selection process of construction contractors. In particular, hiring Halloran was questionable since FRE suffered a significant loss on a previous building built by

Halloran. As well, Andy is still on the board of Halloran, so he should not be included in the selection process for future construction projects.

**Risk:** There are increasing economic difficulties in the two cities, potentially resulting in tenants being unable to pay rent or in decreasing occupancy rates, which would have a significant impact on FRE's financial position.

**Mitigation:** FRE could increase efforts to hire tenants to do work at the rental complexes, which would allow tenants to earn money that can go toward their rent. To align with its philanthropic values, FRE could introduce a new policy to allow tenants who have lost their jobs to defer a rent payment.

**Risk:** There are foreign exchange risks on equipment replacements, particularly in the older buildings that may need a significant investment in new equipment in the near future.

**Mitigation:** FRE should source future purchases of major equipment from Canadian suppliers in advance. If FRE decides to outsource the maintenance department, the new company may be able to recommend new Canadian suppliers.

**Risk:** Heating oil prices have increased, which will make it more expensive for either the tenants or for FRE.

**Mitigation:** While it may cost a lot in the short term, FRE should switch old oil heaters to more modern natural gas heaters. This could be done over a number of years to spread out the capital expense.

FRE could also inspect the heating efficiency of the buildings and improve insulation, windows, etc., as necessary.

**Risk:** The property values are forecast to be flat or decreasing for years. While this does not affect FRE's day-to-day operations, it could hurt financing for future projects.

**Mitigation:** Given FRE's mission to provide affordable rental apartments, resale value should not be a significant strategic concern. FRE, however, may want to consider other towns and cities for future projects. Perhaps FRE could sell one or two current properties and uses the proceeds to buy in other cities.

**Risk:** Government constraints have led to reduced government funding. This could eliminate the possibility of future projects, like the Carter property.

**Mitigation:** If FRE needs financing to continue to expand its affordable apartments, it could actively look for external sources of financing, like the Bates Foundation. FRE could also increase its profitability target beyond 3% through cost reductions, not rent increases, and could pursue more profit maximization projects like the luxury tower to offset the reduced government funding.

**Risk:** Andy has a conflict of interest with his role on the board of Halloran, which is one of FRE's major suppliers and has provided questionable construction quality. Andy has told staff not to investigate the latest building with a cracked foundation, which supports his being in conflict.

**Mitigation:** Remove Andy from discussions and decisions that involve Halloran. Ensure there are multiple bids received on new construction projects and exclude Andy from the selection process.

A brief quantitative analysis gives a picture of FRE's current financial situation and may identify any financial and operational risks:

	<b>2017</b>	<b>2016</b>	
Return on equity	1.95%	2.03%	<i>2017 based on 12/11 of income</i>
Current ratio	0.92	0.25	<i>Current assets ÷ Current liabilities</i>
Profit margin	3.3%	3.4%	<i>Net income ÷ Sales</i>
Debt-to-equity	2.89	2.21	<i>Total liabilities ÷ Equity</i>

The current ratio has improved significantly with the increase in cash. It should be noted that the other big change is related to the BOT project, with repayment of \$9.5 million expected in October 2017 from the City of Prince Joel.

FRE has been able to meet its target 3% income before tax profit margin (3.3% after tax and 3.8% pre-tax). However, it has not been able to meet its 3% return on equity. This should be discussed with Gloria, as well as whether a return of 3% is a realistic goal given FRE's philanthropic mission.

The debt-to-equity ratio has worsened, but this ratio is also affected by the BOT project. If that project is removed from the calculation, the ratio is close to 2016 at 2.19.

For Assessment Opportunity #8 (Performance Management), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts a risk assessment and identifies some mitigation approaches.

**Competent** – The candidate completes a risk assessment and mitigation discussion.

**Competent with distinction** – The candidate completes a thorough risk assessment and mitigation discussion, or the candidate completes a less thorough risk assessment and mitigation discussion but includes quantitative analysis to identify additional risks.

**Assessment Opportunity #9**

The candidate prepares a quantitative analysis of the proposed outsourcing of the company's property maintenance function.

*The candidate demonstrates DEPTH in the Performance Management role.*

I have carried out the quantitative analysis below. I have used 12/11 of the repair and maintenance costs from the August 31, 2017, financials as the base line. I have not considered the lost tax shield on the vans or any taxable income resulting from the sale of the tools

One-Time Costs

Termination costs	11	employees
Per employee	\$21,300	\$(234,300)
Sale of vans		144,000
Sale of other equipment		<u>40,000</u>
Total one-time costs		<u>\$ (50,300)</u>

		<u>Bid at</u>	<u>Bid at</u>
<u>Annual Savings</u>		<u>\$850,000</u>	<u>\$1,050,000</u>
	12/11		
2017 cost of department	adj.	\$1,251,398	\$1,251,398
Maintenance manager retained		(99,960)	(99,960)
Admin. assistant retained		(33,930)	(33,930)
Remove cancelled contract		<u>48,000</u>	<u>48,000</u>
Total costs saved		\$1,165,508	\$1,165,508
Contractor fee		\$ 850,000	\$1,050,000
Cost of supplies	12/11 adj.	<u>168,897</u>	<u>168,897</u>
Total outsourcing cost		\$1,018,897	\$1,218,897
Annual savings/(expense) in Year 1		\$ 96,311	\$(103,689)
Annual savings/(expense) after Year 1		\$ 146,611	\$ (53,389)

Assumptions: It is not clear whether the \$48,000 refund associated with the one-time cancelled contract was received or paid out; I have assumed that it was received. Also, I have assumed that the cost of parts purchased through the contractor remains the same, since the contractor would get parts cheaper but would then add a small profit.

There is a clear financial benefit to FRE if an accepted proposal offer comes in at \$850,000. In this case, by Year 2, contracting out the maintenance department would improve FRE's net income by over 55%. However, contract offers coming in at \$1,050,000 would result in FRE being in a worse financial position.

Further analysis indicates that the highest proposal that FRE should accept is \$946,311 ( $\$850,000 + \$146,611 - \$50,300$ ).

Neither of these analyses considers the impact of increased maintenance costs for the aging buildings. With outsourcing, maintenance is a fixed cost, making it more favourable to outsource.

For Assessment Opportunity #9 (Performance Management), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts a quantitative analysis of the outsourcing option.

**Competent** – The candidate completes a quantitative analysis of the outsourcing option at various price points.

**Competent with distinction** – The candidate completes a quantitative analysis of the outsourcing option at various price points and determines the highest proposal amount FRE should accept.

### Assessment Opportunity #10

The candidate discusses the qualitative aspects of the proposed outsourcing of the company's property maintenance function.

*The candidate demonstrates DEPTH in the Performance Management role.*

I have provided an independent assessment of the proposal to outsource the company's maintenance function.

Pros to outsourcing:

- It eliminates inefficient maintenance workers who are apparently not busy, as demonstrated by their long breaks and long timelines to complete projects.
- It eliminates the possibility of a union strike, which is more likely given this has recently happened in other cities with similar unions.

- Two of the potential bidders have an excellent network of skilled trades connections to carry out maintenance, ensuring efficient and effective completion of projects.
- FRE would have less HR administration and supervision, freeing up resources to commit to other work.
- It reduces the risk of higher maintenance costs associated with FRE's older buildings, since the cost of maintenance would be fixed.
- Final contract terms could still be created to meet the needs of FRE and minimize any risks.

Cons to outsourcing:

- FRE would have less control over the outsourced staff versus the employees, so there would be uncertainty about the quality of work done. Poor workmanship could result in substantial costs for FRE down the road.
- This will be the company's first ever layoff, which will likely shock all employees and lower morale, especially since FRE has been achieving its goal of 3% income before tax.
- Laying off employees could also damage FRE's reputation, which could lower occupancy rates and decrease productivity from the remaining employees.
- There have been no significant issues or problems with the maintenance staff, so laying them off could lead to possible legal action by the union.
- If no suitable contractor submits a proposal or FRE cannot reach an agreement with a contractor, maintenance would continue to be carried out by the same staff, but the working relationship could be tarnished. As well, the company culture could be negatively affected.
- Outsourcing is contrary to FRE's philanthropic values and its policy of helping tenants with employment. If FRE outsources maintenance, not only would some tenants lose their jobs, but FRE could also lose them as tenants.
- Timing of repairs may not meet FRE's needs. With in-house maintenance staff, FRE can control the prioritization of work done. With outsourcing, repairs at FRE properties could fall into a lower priority, extending the time it takes to make the repairs.

To reduce risk and some of the disadvantages of outsourcing, here are some items that FRE should insist be included in the contract:

- Contractor to consider hiring current maintenance workers.
- Clauses to ensure work is done effectively and efficiently.
- Sufficient notice period should either party want to terminate the contract, which would allow for FRE to find replacement maintenance services.
- Payment terms to be spaced over the course of the year.

### **Recommendation**

Although the maintenance department appears underutilized, the staff complete their work as needed. FRE has also been able to maintain its 3% income-before-tax profit, indicating there is not an immediate need to cut costs or people. Laying off the maintenance team will have a negative effect on the morale and culture at FRE for a small financial gain. The philanthropic mission of FRE should be driving the decisions, not the need to improve the bottom line. Therefore, I recommend FRE not contract out the maintenance department.



Instead of outsourcing, FRE could look at improving the maintenance function. Perhaps FRE could expand the duties and responsibilities of the maintenance team to make them more effective. FRE could also provide more training and incentives to the maintenance team to encourage more efficient repairs.

For Assessment Opportunity #10 (Performance Management), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts a qualitative discussion of the outsourcing alternative.

**Competent** – The candidate provides a qualitative discussion of the outsourcing alternative and includes a recommendation consistent with their analysis.

**Competent with distinction** – The candidate provides a thorough qualitative discussion of the outsourcing alternative and includes a recommendation consistent with both the qualitative and the quantitative analysis.

### Assessment Opportunity #11

The candidate discusses the organization's management incentive schemes.

*The candidate demonstrates DEPTH in the Performance Management role.*

Management incentives should motivate the company's managers to achieve personal goals for their area of management that are congruent with the company goals, mission statement, and strategy.

The current plan for the three managers has merit, but incentives should in part be tied to the philanthropic objectives of the company in addition to the 3% income-before-tax target. It may also be more consistent if the larger part of the total bonus available is tied to measures other than profit — ones that the individual employees can control. For example, the total bonus available is 9% of salary. Instead of basing 6% on company profitability, that could be 3%, with 6% based on individualized measures.

FRE could consider a Balanced Scorecard approach to measure performance. This approach would consider the strategic agenda of the organization and would incorporate a mix of financial and non-financial measures. For most of the managers, the non-financial measures should carry the greater weight. I have some suggestions for measures for specific managers.

The maintenance manager's incentive program should be revised so that it is not all or nothing with respect to the specific measures. To keep him motivated, he should receive a partial bonus for meeting some of the key objectives. Assuming the maintenance department is not outsourced, there should be measures in place to improve the inefficiency of the maintenance team and to not exceed the maintenance cost budget. More importantly, the maintenance manager should be focused on more than cost measures. For example, it is important that employees continue to be satisfied with work, so there should be a measure related to that, like employee survey results and employee training. The maintenance manager should also be focused on tenant satisfaction and response time, measured through a tenant survey.

Property managers should receive their bonuses based on rent collected versus budget, but not necessarily on revenue growth and maximization since they do not have control over rental rates. A target like occupancy rate would be appropriate and would contribute to the key success factors and motivate property managers, since it is something they can influence. A measure related to minimizing vandalism would also be a timely measure to introduce. A measure related to their direct reports (i.e., superintendents), like annual training, would be appropriate as well.

Superintendents are the front-line contacts with tenants and should have measures related to the customer. The number of complaints is a reasonable measure, but the goal of having zero complaints is not reasonable because it would take only one disgruntled tenant to eliminate a superintendent's bonus. Since satisfied tenants are unlikely to report anything to the head office, regular tenant surveys would be a good measure. Tenant turnover or an exit survey for tenants could also be measures. A measure related to reducing vandalism would be appropriate for the superintendents as well, since the approach used varies by superintendent and it would be beneficial for them all to aim for the same level of prevention. For the financial perspective, a cost control measure would be appropriate, since they have no control over revenues, and this would link to FRE's key success factor of efficient operations.

In all cases, measures should be under the individual's control and part of their regular responsibilities. The weighting of the measures should relate to FRE's mission and key success factors to ensure everyone is working toward the same goal.

It was not appropriate to pay out a bonus to the unethical property manager. While the unethical action and his bonus payment are not related, the wrong message is being sent by rewarding a bonus to an unethical employee. FRE needs to revise its policies so that unethical behaviour is unacceptable and will not be rewarded.

For Assessment Opportunity #11 (Performance Management), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss FRE's management incentive schemes.

**Competent** – The candidate discusses FRE's management incentive schemes and individual management schemes or a case-specific Balanced Scorecard.

**Competent with distinction** – The candidate discusses FRE's management incentive schemes and individual management schemes or a case-specific Balanced Scorecard and links the discussion to FRE's mission/objectives/KSF.

### **Assessment Opportunity #12**

The candidate discusses where the company's activities are misaligned with the mission statement.

*The candidate demonstrates DEPTH in the Performance Management role.*

I have been asked to identify where the company's activities are misaligned with the mission statement. The mission statement is: *To provide affordable rental apartments*. Also, FRE is currently focused on helping young individuals and families.

Several significant projects that FRE has taken on are not aligned with the current mission.

The rent-to-own program has the objective of giving tenants the opportunity to own their own homes. This assists those with low incomes in owning their own property and building up equity, which is beneficial for them in the long term, so the program does align well with FRE's philanthropic values. However, FRE's mission is to provide affordable rentals, and getting into the business of selling apartments does not match this mission.

The build-operate-transfer project also does not seem consistent with the mission statement. While it does provide affordable rental apartments, the project is different from the rest in that FRE will be selling off the property to the city, versus ongoing operation of the property. For something that does not align well with the mission statement, FRE took on considerable risk with the amount of capital it used to build the project (which FRE has yet to be reimbursed for). Projects of this magnitude should be approved by the board, who should be using the mission statement to guide their decisions.

The construction of luxury apartments is clearly not providing affordable apartments and is, therefore, contrary to the mission. However, the profits from the project will help FRE continue to provide affordable apartments, so while it appears to be a mismatch with the current mission statement, it does help FRE achieve its mission. The board should carefully consider whether FRE should undertake similar projects in the future. While these projects may help FRE finance its affordable apartments, building luxury housing sends a confusing message to its stakeholders.

The company has reached out to specifically help indigenous people in the context of the federal government-funded Carter Apartment Building. FRE is focused on young individuals and families but not specifically on indigenous people, so while this project does not appear to explicitly line up with the current mission statement, the mission does not indicate specifically who FRE is trying to help.

FRE plans to build townhouses to rent out. These are not rental apartments, so this is not consistent with the mission statement, which only refers to apartments. More importantly, renting out townhouses instead of apartments would likely result in higher rental rates as compared with rates for apartments, which is somewhat contrary to providing affordable housing.

FRE is considering the purchase of vacant land for future use or speculative purposes. This purchase makes sense, assuming it will be used for future affordable apartment projects. However, if the purchase is for speculative purposes, this is clearly not aligned with the mission. Speculation has the objective of profit and is generally high risk. Both of these characteristics do not fit well with FRE's philanthropic objective and already high debt-to-equity ratio.

The vice-president has suggested outsourcing maintenance. While this seems like a reasonable business alternative to consider, it would mean laying off 11 employees who are currently completing their work, and this is contrary to FRE's philanthropic values. This cost-cutting initiative is typically one for a profit-driven organization and seems contrary to FRE's not-for-profit character.

It is clear that FRE is engaging in projects that diverge from its current mission statement. While the projects appear to make good business sense, they are contrary to how FRE was set up to operate. Therefore, FRE should revisit and possibly revise its current mission statement, develop a vision statement (i.e., where FRE aspires to be in the future), or change future decision-making to align better with the current mission.

For Assessment Opportunity #12 (Performance Management), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss the alignment of current activities with the current mission statement.

**Competent** – The candidate discusses the misalignment of current activities with the current mission statement.

**Competent with distinction** – The candidate thoroughly discusses the misalignment of most current activities with the current mission statement.

### Assessment Opportunity #13

The candidate discusses possible revisions to the current mission statement.

*The candidate demonstrates DEPTH in the Performance Management role.*

You have asked for a fresh look at the organization's mission statement and suggestions of improvements to it. The current mission statement may need updating because many current projects do not fit with the mission, indicating that it may not be aligned with today's environment and customers. At the same time, what is actually being done should be reviewed from a strategic perspective by the board and management to see if the activities are in line with what Gloria and the board envision. It could be that they are moving in the intended direction.

The mission statement is currently: *To provide affordable rental apartments.*

To improve the mission, Gloria and the board need to decide on FRE's priorities. Any changes to the mission should reflect the core reason that Gloria founded FRE: to reduce waiting lists and improve the quality of affordable housing. In addition, the mission should answer these questions: Who are the customers? Where does FRE want to operate? What is the goal(s) of FRE? A good mission statement will help all stakeholders understand the company and help employees make the right decisions.

FRE has a clear profit target, which should be integrated into the mission to make it clear that FRE is a for-profit company even though it has a philanthropic goal.

The current statement does not specify where the company operates. If it is to remain strictly in Bluebell and Prince Joel, the mission statement should be clear on this. Given the current economic state of these two cities, this may be a good time to explore other regions and build that into the mission statement.

It is implied with “affordable rental” that customers are those who need financial help, but it should be clear in the mission who FRE’s target customers are. Currently FRE is focused on young individuals and families, but the populations in both Prince Joel and Bluebell are getting older. Perhaps FRE needs to reassess who they are focused on.

The mission statement says nothing about the company’s employees, but it does try to hire people who believe in FRE’s philanthropic mission and who live in FRE’s apartments. The mission statement could state this explicitly. Clearly, FRE wants the employees to be fully engaged in this philanthropic work.

Perhaps the mission statement could acknowledge that FRE often seeks to work in partnership with governments, given this is frequently the model, even in an environment of tight government finances. There are many benefits to working with governments that also share the goal of improving society.

FRE is trying to help tenants obtain ownership. This is not covered in the current mission statement but could be if it is an important objective to Gloria and the board. Helping people achieve home ownership aligns with Gloria’s goal to help low-income earners find quality housing.

The wording for a possible revised mission statement could be as follows:

*To provide affordable housing arrangements in the cities of Bluebell and Prince Joel for low-income earners, while generating a small profit. FRE values working with tenants, employees, businesses, and governments that have the same passion.*

This statement should be approved by Gloria first, and after that by the board.

It would be reasonable for FRE to also create a vision statement that describes to all stakeholders where FRE wants to be in the future. It could be centred on the philanthropic ideals with which FRE was founded: *To ensure all residents of Bluebell and Prince Joel have a roof over their heads.*

Understanding where FRE wants to be in the future will help the board and management make decisions on which large projects FRE should pursue.

For Assessment Opportunity #13 (Performance Management), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to critique the current mission statement.

**Competent** – The candidate critiques the current mission statement and attempts to recommend improvements to the mission statement.

**Competent with distinction** – The candidate critiques the current mission statement and recommends improvements and a new mission statement and vision statement.

#### **Assessment Opportunity #14**

The candidate discusses reporting systems improvements.

*The candidate demonstrates DEPTH in Performance Management role.*

Judy has specifically asked us to consider what additional information the accounting team could provide that would help the board and management make better operational and strategic decisions.

The company's systems should provide much more information than quarterly income statements. Reports should relate to the company's key success factors, which help achieve the mission. The key success factors are high occupancy, good rent collection, efficient construction, and efficient and effective operation of complexes.

Reports should also relate to the users' needs, so the reports going to management would likely be different than those going to the board. The reports also need to be timely and relevant. For example, the progress of the build-operate-transfer project should be reported on frequently to the board because the financial impact of this project is significant to FRE and the project is nearing completion.

Reports for managers should relate to what they are responsible for. For example, the property managers could get reports specific to their locations, like this:

	<b><i>Carter</i></b>	<b><i>Calve</i></b>	<b><i>Blain</i></b>
<i>Current occupancy</i>	82%	100%	95%
<i>Total tenants and families</i>	131	148	115
<i>Average monthly rent</i>	\$49,428	\$56,482	\$40,342
<i>Rent overdue</i>	\$ 940	\$ 3,202	\$ 598

For superintendents and property managers, detailed operational information would be prudent. For example, reports on utility spending by building and per unit could help them identify trends, repairs that are needed, and excess consumption by tenants.

Property management reports would be useful for management purposes and to ensure efficient operations. They could provide information such as the following:

- Aged rent overdue, to drill down into how serious a problem this is
- Late rent by reason, if this is possible
- Waiting list by building
- Tenant turnover by building
- Same people on multiple building waiting lists
- Tenant satisfaction by building, with comparison of change over time
- Full occupancy monthly rent versus actual monthly rent
- For the RTO project, reports on late rent by tenants and on months to possible purchase, based on purchase credits

Managers would also be interested in reports that relate to their specific incentive schemes. For example, if superintendents are measured on tenant satisfaction, they should receive regular reports that provide a status on that measure.

The board would be interested in higher-level reports to give them an indication of the overall health of FRE and how it is progressing toward its mission and goals. These reports could include updates on major projects like the luxury apartments and the build-operate-transfer building. They should also get reports on how close FRE is to achieving its targets of 3% pre-tax return on sales and 3% return on equity. Once FRE hires someone with financial expertise, the board should get the full set of financial statements so they can have a complete financial picture of the company. They could also be updated on things outside of the accounting software, like the status of the proposed property tax increases, property valuations, and the pending lawsuit.



For Assessment Opportunity #14 (Performance Management), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to discuss additional information that would help with management and board decisions.

**Competent** – The candidate discusses additional information that would help with management and board decisions.

**Competent with distinction** – The candidate discusses additional information that would help with management and board decisions and relates it to key success factors and targets.

#### **Assessment Opportunity #15**

The candidate reviews the company's governance issues and provides recommendations for improvement.

*The candidate demonstrates DEPTH in the Performance Management role.*

I have been asked to review FRE's governance and provide recommendations for improvement. As a private company, FRE is not subject to regulations on the governance structure. I will provide some best practices and reasons for my recommendations.

Ideally, most of the board members are independent. Independent members are more likely to provide unbiased advice and contribute to better decision-making. Therefore, Gloria's friends and her uncle should be replaced on the board. At the moment, the board has yet to question any of Gloria's proposed projects, which is not effective. The board should question projects, and having independent members will encourage a healthy debate.

Board members should bring expertise that is relevant to FRE's business. At the moment there are many gaps in skills and knowledge on the board. It is good that the board has legal and fire safety expertise, which are both relevant to FRE's business. Gloria's friend who is on another board may be able to contribute insights on board processes and the current environment in the charity realm; however, her lack of work experience is a little concerning. The retail entrepreneur may be able to provide insights on the status of the Prince Joel community (i.e., if the retail business is down, this may indicate tougher economic times); however, this person's expertise is not entirely relevant to FRE's business.

Board members with experience in the following areas should be added:

1. Accounting
2. Community housing
3. Human resources
4. An ex-politician, who would have insight into provincial or municipal funding and relations
5. Public relations
6. Building safety
7. Construction
8. Real estate

With these changes, FRE would be able to rely on the board to provide strategic direction and advice that is reliable and backed by experience and knowledge.

Once the board acquires new members with diverse skills, it could strike some useful committees of the board of directors, even though none are legally required. This would improve good governance and the effectiveness of the board. These could include the following:

1. A compensation committee that could further analyze the current management incentive schemes and proposed improvements.
2. An audit committee that could examine internal controls and review financial statements to ensure there are no future mistakes or adjustments required.

The committees would be more efficient by having directors examine their area of expertise (i.e., Gloria may know nothing about internal controls, so there is no point in having her examine them).

It does not seem like the current board is looking at the strategic direction of the organization, and it appears that FRE is taking on projects that do not align with the current mission. The role of the board is to ensure the mission is being met or revising the mission to meet the new objectives of the company and address the current state of the environment.

Finally, the board should issue a formal Code of Ethics and Code of Conduct, given the ethical lapse in the area of tenant prioritization by one of the property managers and the conflict of interest that exists with Andy. Andy is currently on the board of Halloran, which may be why he is telling staff not to investigate the crack at the Atman property. There is a clear conflict of interest that needs to be addressed.

For Assessment Opportunity #15 (Performance Management), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to recommend improvements to the current board of directors.

**Competent** – The candidate recommends improvements to the current board of directors.

**Competent with distinction** – The candidate recommends improvements to the current board of directors with sufficient explanation and justification.

**DAY 2 – MARKING GUIDE – TAXATION ROLE  
FERGUSON REAL ESTATE INC. (FRE)**

In the Taxation role, the candidate is expected to discuss owner compensation strategies. The candidate is also expected to analyze the impact of the investment offer from the Bates Foundation of America (BFA), including suggesting planning measures necessary to improve the tax results.

In addition, Gloria identified a number of smaller transactions that needed to be discussed, including a donation of shares, a proposed stock option plan, an error in the prior year tax return, an exchange of properties, and a proposed transfer of a property to the corporation.

See Assurance Guide for the Common Assessment Opportunities #1 to #7.

**Memo**

**To: Judy Kong, Controller**

**From: Tax CPA**

**Re: Tax analysis**

**Assessment Opportunity #8**

The candidate discusses the tax implications of changes to Gloria's compensation and optimum mix remuneration for Gloria.

*The candidate demonstrates DEPTH in the Taxation role.*

I have been asked if there should be any changes to Gloria's remuneration to optimize her personal tax position without hurting the corporation's tax position.

The corporation is currently paying tax entirely at the small business rate of 11% federally (this will change if FRE loses its Canadian-controlled private corporation status via the BFA investment; see discussion in the next section). A thorough analysis of provincial tax rates would be necessary to determine whether it would be more appropriate for Gloria to increase the proportion of her income made up of salary or the proportion made up of dividends.

Before considering quantitative factors, however, some qualitative ones should be addressed:

- If Gloria takes more salary, this would create a tax deduction in the corporation, reducing corporate taxes payable.
- Dividends are not tax deductible to the corporation, but they can be used to trigger refunds of the refundable dividend tax on hand (RDTOH) balance carrying forward.
- Gloria could also take payment of capital dividends, which would be tax-free to her.

- If FRE is taxed at the small business rate, only dividends other than eligible dividends can be paid. Eligible dividends can only be paid where the corporation has paid tax at the higher business rates, thus accumulating a general rate income pool (GRIP) balance. However, since FRE has taxable capital in excess of \$10 million, it is likely that the small business deduction has been at least partially ground down. Further analysis would be necessary to determine if there is any GRIP balance available.
- Some opportunity for deferral is available if the corporation declares a bonus to Gloria at the end of the taxation year and pays it to her within 179 days of the year end. The corporation will be able to deduct the bonus in its current year, and it is not taxed to Gloria until she receives it.
- Gloria should consider whether she wishes to fully participate in the Canada (or Quebec) Pension Plan (CPP/QPP) after retirement, as she is currently taking a salary of less than half of the maximum pensionable amount. This would increase cash outflows right now (to both FRE and Gloria) but would provide Gloria with stability in her retirement.
- Taking more salary would also increase her RRSP room. The RRSP deduction limit for Gloria is calculated as the lesser of 18% of earned income and an annual limit, which is \$26,010 for 2017. “Earned income” for RRSP income includes salary income as well as rental income, so depending on what portion of the \$80,000 of other income she earned is rental income, she may already be close to the maximum RRSP earned income. However, there is room for at least some additional salary income to top this up to the maximum.
- Given the discussion of donations further in this memo, there may be opportunities to plan compensation to maximize these. Taking a larger portion of her income as dividends will increase her net income for tax purposes, which will increase the amount of donations Gloria is eligible to claim in each year. However, this may also limit the usefulness of donations, since the dividend tax credit will eliminate a bigger portion of her taxes, and this will increase corporate taxes for FRE. Taking salary will allow a corporate deduction, while still allowing credits for charitable donations worth up to 75% of her income to be eligible for credits.
- The corporation has \$8 million of share capital on the balance sheet, which is equal to the amount Gloria initially invested — it is likely this is equal to the balance of paid-up capital (PUC). Gloria could take back cash as PUC reductions, which she would receive tax-free.
- There is also the option of deferring personal taxes altogether and reducing the income Gloria receives from the corporation generally — that is, she could leave the money in FRE for now and make withdrawals later when she is retired and in a lower tax bracket. This may not be practical, given some of the options Gloria is considering (including donating shares or selling them), but if she decides to keep the corporation to herself, this option could prove advantageous. It could also have a negative impact on the ability to claim the lifetime capital gains deduction since it would result in accumulation of assets that are not used in an active business; however, this issue could be resolved by using the funds to pay down debt. Care should be taken to prepare for any proposed changes with respect to investment income.

*[NOTE: While calculations were not necessary to support this discussion, candidates who provided relevant calculations were rewarded.]*

## **Medical Expenses**

A taxable benefit must be included on Gloria's T4 for the private knee surgery the company paid for in 2017 since it is a benefit enjoyed by Gloria, an employee, by virtue of her employment at FRE, pursuant to Income Tax Act subsection 6(1). This assumes that Gloria received this benefit as an employee; that is, that a similar benefit would not be provided to her were she only a shareholder.

If, instead, FRE books the payment as a shareholder loan, the loan does not get included in Gloria's T4, but Gloria must repay this amount. If it is outstanding for more than two consecutive taxation year-ends of FRE, it is brought into Gloria's income by virtue of subsection 15(2) in the year that the loan was made.

Currently, Gloria has to pay out of after-tax dollars for the knee surgery, although she gets a federal tax credit of 15% on the medical costs that exceed the lesser of 3% of her net income for tax purposes or a fixed threshold defined annually. "Medical expenses paid or provided for by an employer but included in the employee's income are deemed by paragraph 118.2(3)(a) to have been paid by the employee and, therefore, can be claimed by the employee for purposes of the medical expense tax credit, assuming the expenses otherwise qualify. The employee is deemed to have paid such expenses at the time the employer paid or provided them." [Income Tax Folio S1-F1-C1, Medical Expense Tax Credit].

If Gloria can get her knee surgery covered by the benefit plan, this will be tax-free, since benefits paid out of a plan are not a taxable benefit. The cost of premiums would be a deduction to the corporation. Gloria should change the plan so the surgery is covered, if the existing insurer is willing to cover such items — otherwise, a self-insurance plan could be established to cover such costs.

## **Stand-By Charge on Automobile Benefit**

The payroll manager is correct that Gloria must be taxed on the benefit of getting the personal use of the \$41,500 car, but her estimation methodology does not comply with the relevant provisions of the Income Tax Act. We understand that all of Gloria's vehicle usage is personal — none of it is for business.

A T4 taxable benefit will have to be provided to Gloria as 2% per month of \$41,500 pro-rated by the number of days the vehicle was made available to her in the year, and an operating cost benefit of 25 cents per personal kilometre driven. This will be more than the amount that Gloria has been taxed on so far; her pay and deductions must be adjusted.

If Gloria has some business usage (i.e., she uses the vehicle to visit properties owned by the company from time to time), this would lower the taxable benefit.

For the corporation, only the first \$30,000 of the car cost is amortized using the tax capital cost allowance rates, in class 10.1 at 30% per annum with the half-year rule, with the excess being not eligible for any tax write-off.

For Assessment Opportunity #8 (Taxation), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts an analysis of Gloria’s cash withdrawal strategy or discusses one of the taxable benefits (e.g., medical expense, vehicle expense).

**Competent** – The candidate discusses Gloria’s cash withdrawal strategy, demonstrating an understanding of personal-corporate integration, and discusses one taxable benefit (e.g., medical expense, vehicle expense).

**Competent with distinction** – The candidate thoroughly discusses the cash withdrawal strategy issue, demonstrating an understanding of personal-corporate integration. The candidate also discusses the taxable benefits (e.g., medical expense, vehicle expense).

#### Assessment Opportunity #9

The candidate discusses the tax impact of the new investment offer from Bates Foundation.

*The candidate demonstrates DEPTH in the Taxation role.*

If FRE accepts the Bates Foundation of America (BFA) offer as presented, the company will no longer be a Canadian-controlled private corporation (CCPC) for income tax purposes. BFA, a non-resident of Canada, will be able to elect a majority of the members of the board of directors of FRE, so it would have de facto control, even though there is no de jure control based on share ownership. This has some major tax implications, set out as follows:

1. The company will no longer pay federal income tax at the preferential small business rate of 10.5% on the first \$500,000 of taxable income; instead, the rate will be at 15%. The increase could be much more significant, depending on the province (we are told FRE’s provincial tax rate on income above the small business limit is 12%, versus 4% for its low-rate income, but this should be confirmed). This will decrease FRE’s future cash flows because more of it will be used to pay income taxes.

2. Gloria will not be able to benefit from the \$835,716 lifetime capital gains deduction if she sells her shares in the future, since the shares of FRE will no longer be qualified small business corporation shares. The criteria are as follows:
  - a) The shares are owned by the individual for the 24 months preceding the sale;
  - b) During the last 24 months, 50% or more of the assets of the corporation are used principally in an active business carried on in Canada; and
  - c) The corporation must be a small business corporation (SBC) on the date the shares are sold (that is, a CCPC substantially (90%), all of the assets of which are used in active business).
3. Stock option taxation is less favourable, namely because employees will not be able to defer the tax benefit arising from the exercise of stock options until the sale of the underlying shares. This is punitive, since the employee generally has no cash to pay the taxes if the shares have not been sold yet.
4. Tax return payments will be due two months after year end, instead of the three months for a CCPC.
5. The company's dividends, after distribution of accumulated earnings, that were taxed at the low rate, known as the low-rate income pool (LRIP), would become eligible dividends to Gloria, with a higher gross-up rate (138% versus 117%) and a higher dividend tax credit, and, therefore, ultimately taxed at a slightly lower effective rate to Gloria.
6. RDTOH will be lost and cannot be accessed after the company is no longer a CCPC. The capital dividend account (CDA) will not be affected by the loss of CCPC status since it is still available to private corporations.

### **Acquisition of Control Implications**

When BFA acquires these shares and signs the shareholder agreement, most likely a unanimous shareholders' agreement, giving it de facto control, an "acquisition of control" will take place. There will be a number of tax implications on the acquisition of control:

- It will create a deemed year end, and a tax return will need to be filed.
- If the acquisition takes place before October 1 (or after), it will cause a short year for income tax purposes, requiring a pro-ration of certain amounts, such as capital cost allowance based on the number of days in the particular taxation year.
- The deemed year-end will count as one year in the carryforward of any losses or investment tax credits.



- Immediately before an acquisition of control, capital property and depreciable property with inherent losses must be written down to their fair market value. Assuming tax values are similar to book values (this should, obviously, be confirmed), it is likely this will apply to FRE because some properties have estimated values below their book values.
  - Realizing losses on the depreciable property (i.e., the buildings and fixtures, along with any acquired goodwill or other depreciable intangible assets) will create non-capital losses to the extent that there is not sufficient income to offset the losses.
  - Losses on the capital property (i.e., the land) will increase the capital loss carryforward.
- Non-capital losses earned from investment income, as well as all capital losses, will expire immediately.

### Other Implications

No withholding tax will apply to dividends paid to BFA due to the Canada-U.S. tax treaty (since BFA is an exempt organization).

For Assessment Opportunity #9 (Taxation), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate identifies that an acquisition of control will take place or that FRE will lose its CCPC status.

**Competent** – The candidate identifies that an acquisition of control will take place and that FRE will lose its CCPC status. The candidate discusses the implications of one of these issues.

**Competent with distinction** – The candidate identifies that an acquisition of control will take place and that FRE will lose its CCPC status. The candidate discusses the implications of both of these issues.

### Assessment Opportunity #10

The candidate discusses planning opportunities that will allow Gloria to use the lifetime capital gains deduction if there is a Bates Foundation investment.

*The candidate demonstrates DEPTH in the Taxation role.*

**Planning to Minimize Taxes with Respect to the Acquisition of Control**

An election can be made to increase the tax values of any properties that have accrued gains, as high as their fair values. This will create taxable capital gains, recapture income, or do both, which will be eliminated by the capital and non-capital losses that would otherwise expire. This would provide the advantage of lower recapture or taxable capital gains on future sales of the properties elected on.

**Planning to Minimize Taxes with Respect to the Loss of CCPC Status – LCGD**

If FRE is going to lose CCPC status because of the BFA investment, Gloria could consider selling *some* of her shares to a holding company, for fair market value, generating the resulting gross gain equal to the lifetime capital gains deduction (LCGD) limit for the year (currently \$835,716). This would crystallize her LCGD and could save tax on a future sale. This could also be structured as a partial sale of her shares to BFA, rather than the issuance of shares from treasury, should this be agreeable to BFA.

Alternatively, she could transfer *all* her shares to a holding company for an amount between tax cost and fair market value, using section 85 to elect a transfer price equal to her cost basis plus the amount of LCGD she would like to use.

In terms of the mechanics of the sale, Gloria cannot take back cash or non-share consideration in excess of cost without triggering a deemed dividend. If Gloria has a cumulative net investment loss (CNIL), the LCGD might not be available.

Alternative minimum tax may also be triggered. Under these tax rules, income is adjusted for certain tax preferences, such as the LCGD, and the revised tax base is subject to income tax at the low personal rate federally and provincially. If this amount is higher than normal income tax, the alternative amount is payable.

If Gloria's FRE shares go down in value in future and Gloria ever has other QSBC share investments that go up in value, then the LCGD may in fact be wasted.

**Planning to Minimize Taxes with Respect to the Loss of CCPC Status – Other**

The easiest solution to both the loss of CCPC status and the acquisition of control would simply be to negotiate the removal of the shareholder agreement providing BFA with de facto control. Control would be maintained by Gloria through her shareholdings, and none of these implications would apply. This would, however, be difficult to negotiate.

To ensure that the RDTOH is not lost, dividends should be paid out before the shares are issued to fully use this balance.

It should be noted that the LCGD can also be used to eliminate capital gains tax on the first \$835,716 of capital gains realized by donating shares. It is not clear if Gloria plans to do both of these things, but if she does, then she could simply ensure she donates the shares to the charity before FRE issues the new shares from treasury.

For Assessment Opportunity #10 (Taxation), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate identifies a planning measure to address the impact of the issuance of shares to BFA.

**Competent** – The candidate identifies some planning measures to address the impact of the issuance of shares to BFA, or the candidate discusses one planning measure.

**Competent with distinction** – The candidate discusses some planning measures to address the impact of the issuance of shares to BFA.

### Assessment Opportunity #11

The candidate discusses the tax implications of Gloria donating her shares of the company.

*The candidate demonstrates DEPTH in the Taxation role.*

### Share Donation

The shares of FRE could be donated by Gloria to an organization that is a registered charity in Canada. It may have to be a special organization to undertake the ownership of shares of this unusual company. The organization might want to fold the company into the charity, but that is outside the scope of this discussion. Under the Income Tax Act, Gloria would get a tax receipt for the fair value of the shares contributed to the charity. The fair value suggested by Gloria would have to be supported for income tax purposes by a valuation. The Canada Revenue Agency could, of course, question the valuation if it determined that it might be overstated.

On Gloria's personal tax return, the proceeds of disposition would be the fair market value of the shares. The fair market value minus the cost would be a capital gain, and 50% of the capital gain would be taxable. There is no exemption of capital gains for the donation of shares of private companies, as there is for donations of public company securities. Given that the Bates Foundation has offered to purchase 45% of the shares for \$9 to \$10 million, the existing shares are likely worth approximately \$22 million ( $\$10 \text{ million} \div 45\% \times 55\%$ ). This value could vary

significantly, given the nature of the industry — a professional valuator should be hired for this purpose. Regardless, Gloria has a significant accrued gain, which will be taxable. The rest of the analysis assumes a taxable capital gain of \$7 million  $(\$22 \text{ million} - \$8 \text{ million}) \times 50\%$ . Fortunately, the lifetime capital gains deduction may be available to reduce the taxes, as discussed earlier.

We understand Gloria's income to be about \$200,000 per year. The maximum charitable donation that is eligible for a credit in each tax year is 75% of net income. Any unused donation amounts may be carried forward up to five years.

In the year of donation, she will have net income of  $\$200,000 + \$7 \text{ million} = \$7.2 \text{ million}$ , 75% of which is \$5.4 million. This would leave \$16.6 million of donations to carry forward to the next four years.

Gloria would only be able to claim a credit for \$150,000 of donations per year in the future, although she may be able to increase this amount by increasing the proportion of her income that she receives in dividends, since the gross-up is factored into the total net income. However, given that her income is mostly not being taxed at 29% and that increasing the dividend income will increase the dividend tax credit, she would likely not be able to claim the full donation amounts in each year anyway, because her taxes would already be fully eliminated.

The impact of the donation would be that Gloria would pay minimal income taxes for the next five years. Gloria may want to consider other options, such as donating sufficient shares each year to eliminate all her income taxes payable, as well as increasing the amount of income she takes from the corporation each year, so that she can still retain control and yet have more tax credits per year.

Gloria should be careful to ensure that her donation is not affected by subsections 118.1(13) through (20), which prevent the issuance of a donation receipt for shares of private companies in very limited circumstances. However, these provisions would only apply if

- Gloria makes the donation to a private foundation, or
- She is non-arm's-length with the charity (being non-arm's-length would include sitting on the board of the charity) *and* remains non-arm's-length with FRE after the donation.

If she gifts 100% of the shares of FRE, then she will likely become arm's-length with it, and these provisions will not be an issue. These provisions can also be easily avoided if the charity disposes of the shares of FRE after Gloria donates them.

Gloria should consider the cash flow impacts of such a donation, since she would be giving away a substantial portion of her net worth (and control of her business) without receiving cash in exchange. This would yield a large tax balance payable, which she may have difficulty funding since no cash would be received in the transaction. She should also consider whether a charity would accept such a donation — there may be more effective ways of supporting charities (such as donation of public securities, which would qualify for an exclusion of the capital gain from her income).

For Assessment Opportunity #11 (Taxation), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate identifies that a taxable capital gain will occur on the donation or that a credit will be available for the fair value of the shares.

**Competent** – The candidate discusses that a taxable capital gain will occur on the donation and that a credit will be available for the fair value of the shares.

**Competent with distinction** – The candidate discusses in depth (considers donation limit, carryforward period, planning, etc.) that a taxable capital gain will occur on the donation and that a credit will be available for the fair value of the shares.

### Assessment Opportunity #12

The candidate discusses the tax implications of the stock option plan.

*The candidate demonstrates DEPTH in the Taxation role.*

I have been asked to set out the implications for the employees and the corporation of the proposed stock option plan.

### Implications for Employees

Assuming the company remains a CCPC, these are the implications for employees:

- No tax implications upon the grant of the stock options.
- No tax implications on employees leaving stock options unexercised (i.e., due to departure).
- No tax implications upon exercising any stock options. An automatic deferral of the taxable benefit is provided when the underlying shares are those of a CCPC.
- Upon sale of the underlying shares:
  - Income inclusion via T4 of the difference between fair market value at the exercise date and the exercise price.

- Since the exercise price is less than the fair market value when the options were granted, a 50% deduction will *not* automatically be available against this income. However, because FRE was a CCPC at the date of grant of the options, if the shares are held for a minimum of two years, a 50% deduction will be made available under par. 110(1)(d.1).
- When the shares are sold, a capital gain equal to the difference between the selling price and the fair market value of the shares on the date the option was exercised will be assessed. This gain will be net of selling costs and may be eligible for the LCGD discussed earlier. Of the remaining gain, 50% is taxable.
- If a net capital loss is generated as a result of this calculation, these can only be applied against capital gains. Any unused amounts can be carried back up to three years or can be carried forward indefinitely and deducted against future taxable capital gains. However, if FRE remains an SBC (as discussed previously) and there is a capital loss on the shares, the loss could qualify as an allowable business investment loss and be deductible against any other income.

### **Possible Variations to the Plan That Could Make it More Favourable for Income Tax Purposes**

If the exercise price would be equal to or more than the fair market value of the shares at the date of the grant, then the 50% deduction noted above would be available whether employees held the shares for two years after exercise or not (that is, the deduction under par. 110(1)(d) would be available instead). They would be eligible for the 50% deduction even if two years had not passed, which is quite favourable.

### **Valuation**

Canada Revenue Agency (CRA) may choose to disagree with the fair market value used by the company based on the formula, even if it is apparently a widely accepted measure for private companies. The method chosen for estimating fair market value does not seem to consider qualitative factors, earnings, or the tangible asset backing. It will tend to be high versus an earnings valuation because 3% profitability is relatively low. It is well below the book value of the shares as well, and this does not consider the higher market value of properties relative to book value. If CRA takes the position that the fair market value is lower, then income inclusions would be higher, per the preceding analysis. Inclusion of a purchase price adjustment clause might mitigate this.

### **Lifetime Capital Gains Deduction**

As noted above, if an employee holds the company's shares for two years and the company is at the time a SBC, then some or all of the capital gain may be tax-free due to the employee's LCGD, assuming they have not used it previously.

## Corporate Tax Implications

It is important to note that the company will not receive any tax deductions related to the stock option plan, despite any accounting entries that will be required to record the compensation expense.

The paid-up capital of the class of shares issued on exercise is increased by whatever gets contributed in cash (i.e., the exercise price).

For Assessment Opportunity #12 (Taxation), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to analyze the stock options.

**Competent** – The candidate discusses the stock options.

**Competent with distinction** – The candidate discusses the stock options in depth, including the impact on both employer and employee.

### Assessment Opportunity #13

The candidate discusses the tax errors related to the 2015 Ajax property sale.

*The candidate demonstrates DEPTH in the Taxation role.*

You asked me to look into whether Income Tax Act 13(21.1) should have applied to the Ajax property transaction. It should have applied, because a capital gain was realized on the land and a terminal loss on the building. This section operates to adjust the terminal loss that would have otherwise been calculated, by reducing the proceeds on the land and increasing the proceeds on the building in order to eliminate some or all of the terminal loss.

This converts the terminal loss on the building, which is normally fully deductible, into an amount that is, in effect, only half deductible, by reducing the gain on the land (which is only half taxable). As such, additional taxes will be payable.

Specifically, this subsection states:

(a) *where in the year the taxpayer...disposes of land adjacent to, or immediately contiguous to and necessary for the use of, the building, the **proceeds of disposition of the building are deemed to be the lesser of***

(i) *the amount, if any, by which*

(A) *the total of the fair market value of the building at the particular time and the fair market value of the land immediately before its disposition [That is, total fair market value, \$2,400,000]*

*exceeds*

(B) *the lesser of the fair market value of the land immediately before its disposition and the amount, if any, by which the cost amount to the vendor of the land (determined without reference to this subsection) exceeds the total of the capital gains (determined without reference to subparagraphs 40(1)(a)(ii) and (iii)) in respect of dispositions of the land within 3 years before the particular time by the taxpayer or by a person with whom the taxpayer was not dealing at arm's length to the taxpayer or to another person with whom the taxpayer was not dealing at arm's length [That is, the lesser of the cost and fair value of the land, \$815,000], and*

*[Result: \$1,585,000]*

(ii) *the greater of*

(A) *the fair market value of the building at the particular time [\$1,440,000], and*

(B) *the lesser of the cost amount [\$1,840,000] and the capital cost [\$2,600,000] to the taxpayer of the building immediately before its disposition,*

*[Result: \$1,840,000]*

**[Result: \$1,585,000 proceeds of disposition on the building]**

*and, notwithstanding any other provision of this Act, **the proceeds of disposition of the land are deemed to be** the amount, if any, by which*

(iii) *the total of the proceeds of disposition of the building and of the land determined without reference to this subsection and subsection (21.2) [That is, total proceeds, \$2,400,000]*

*exceeds*

(iv) *the proceeds of disposition of the building as determined under this paragraph [That is, \$1,840,000.]*

**[Result: \$560,000 proceeds of disposition on the land]**



*[NOTE: Candidates could intuitively derive these results by simply setting land proceeds equal to cost and allocating the remainder of the proceeds to the building, which is the expected result.]*

The corrected calculation, therefore, should have been as follows:

	<u>Land</u>	<u>Building</u>	<u>Total</u>
Proceeds	\$ 815,000	\$1,585,000	\$ 2,400,000
	40%	60%	
Cost/UCC	\$ 804,000	\$1,840,000	
Capitalized interest	<u>11,000</u>		
	<u>\$ 815,000</u>	<u>\$1,840,000</u>	
Capital gain/(terminal loss)		- \$ (255,000)	
Taxable Capital Gain added on T2 Schedule 1		-	
Terminal loss deducted on T2 Schedule 1		\$ 255,000	

Income as filed was \$72,500 of investment income and a \$400,000 deduction against business income, which would have effectively reduced taxes by \$21,267 ( $\$72,500 \times 50 \frac{2}{3}\% - \$400,000 \times 14.5\%$ ).

This transaction will now reduce taxes by \$36,975 ( $\$255,000 \times 14.5\%$ ). Correcting this error should, therefore, trigger a refund of \$15,708. There is an RDTOH balance carrying forward, so this calculation assumes that the change to RDTOH as a result of correcting this error will not reduce RDTOH so far as to reverse any dividend refunds already claimed.

### **Correcting This Error As Well As the Amortization Error**

In order to rectify these errors, the company should submit an amended T2 Corporation Income Tax Return for 2015, to revise Schedules 6 and 8, as well as Schedule 1 and the tax calculations.

T2 Corporation Income Tax Returns may be reassessed up to three years from the date of the original Notice of Assessment, which was issued on August 17, 2016, so we have until August 17, 2019, to correct the error.

However, I recommend correcting the error as soon as possible and paying the balance owing, should one arise from the amortization correction. Interest and penalties will apply on any additional amounts owing, and probably on under-remitted instalments for 2016, which are not tax deductible. If the CRA discovers our error before we correct it, they may open an audit, which would consume significant resources to address.

For Assessment Opportunity #13 (Taxation), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate identifies the impact of ss. 13(21.1) or discusses how to correct errors on a tax return.

**Competent** – The candidate discusses the impact of ss. 13(21.1) and attempts a calculation, or the candidate discusses how to correct errors on a tax return and identifies the impact of ss. 13(21.1).

**Competent with distinction** – The candidate discusses the impact of ss. 13(21.1), including an attempt at a calculation, and discusses how to correct errors on a tax return.

#### **Assessment Opportunity #14**

The candidate determines the tax implications of the Welzer property exchange.

*The candidate is demonstrating DEPTH in the Taxation role.*

I have analyzed the income tax consequences of the exchange of real estate properties by the corporation with Welzer Properties Inc.

This analysis assumes Welzer Properties Inc. is *not* a related party for income tax purposes, which may be different from this definition for accounting purposes. The conclusions could change if it was.

As mentioned by the tax partner at FF, the replacement property rules in the Income Tax Act 44(5) do not apply since rental properties do not qualify as “former business property” as defined in ss. 248(1)).

This exchange is actually a barter. CRA’s treatment of barter transactions is found in IT-490 (ARCHIVED):

- 6. In the case of goods bartered by a taxpayer for either goods or services, the value of those goods must similarly be brought into the taxpayer's income if they are business-related. For example, the value of groceries given by a grocer to someone in exchange for something else must be brought into the grocer's income. In addition, other goods bartered may give rise to a capital gain. Such would be the case if capital property in the form of a valuable painting, a sailboat or land is bartered for goods or services.*

7. *In arm's length transactions, where an amount must be brought into income or treated as proceeds of disposition of capital property, that amount is the price which the taxpayer would normally have charged a stranger for his services or would normally have sold his goods or property to a stranger. The cost of the services, goods or property received by him is the same amount as the total value of the goods, property or services given up, plus any cash given as part of the barter, and minus any cash received as part of the barter.*

It should be noted that even though the IT bulletin referred to above has been archived, the CRA has not yet cancelled or replaced it as part of its Folio project.

The tax treatment essentially follows the accounting treatment. The choice of fair value should probably follow the one chosen for accounting purposes, for consistency and to be able to support the amount to the CRA (it would be illogical to argue a higher valuation for accounting purposes and a lower valuation for tax purposes).

Therefore, for tax purposes, the proceeds of disposition are \$2,200,000, allocated to the land (\$800,000) and to the building (\$1,400,000).

Income tax analysis			
Proceeds of disposition			
	\$ 2,200,000		
	building		land
Proceeds allocated	\$ 1,400,000		\$ 800,000
Cost	1,684,254		606,771
Capital gain/(loss)	\$ (284,254)	denied	\$ 193,229
Taxable capital gain (land)		\$ 96,615	50%
Lesser cost/proceeds	\$ 1,400,000	Building costs	
UCC	\$ 1,345,829		
Recapture		\$ 54,171	

There will be a capital loss on the sale of the building, which is denied because buildings are depreciable property. There will be recapture of capital cost allowance added to taxable income because the building's portion of the proceeds exceeds the undepreciated capital cost (UCC). This will be taxed as business income, at 14.5%, yielding taxes of \$7,855.

The taxable capital gain on the sale of the land will be taxed as investment income, at 50 2/3% (38 2/3% + 12% provincial). FRE will add 30 2/3% to its RDTOH balance, which will be refunded when sufficient dividends are paid. The non-taxable portion of the capital gain will be added to the CDA account.

For Assessment Opportunity #14 (Taxation), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate attempts to calculate the income to be included as a result of the transaction or explains the tax treatment qualitatively.

**Competent** – The candidate analyzes the tax implications of the property exchange transaction.

**Competent with distinction** – The candidate thoroughly analyzes the tax implications of the property exchange, including a calculation of the income to be included as a result.

### Assessment Opportunity #15

The candidate discusses how to minimize the personal and corporate tax consequences of the proposed transfer of the Fish Street property.

*The candidate demonstrates DEPTH in the Taxation role.*

I have been asked to discuss the minimization of personal taxes to Gloria and corporate taxes to FRE with respect to the proposed transfer of the Fish Street property.

This is a related-party transaction, and unless the structure of the proposed transfer is changed, it will result in adverse tax consequences to both Gloria and FRE, by the deeming rules of the Income Tax Act.

Assuming the market value of the property is \$1.4 million, Gloria will be deemed to have sold the property at \$1.4 million, even though only \$1 million was received, because this related-party transaction is deemed to take place at fair market value.

Proceeds of \$1.4 million, less any selling costs, will result in a capital gain for proceeds less cost of \$994,000, since the \$152,000 of improvements would have been capitalized. This could also create substantial recapture for Gloria, since this rental property will be in a separate Class 1 capital cost allowance pool.

At the same time, the company will only be permitted to record the acquisition for \$1 million, the amount paid. There is no bump up to the \$1.4 million fair market value — that is, the adjustment is one-sided. As a result, the \$400,000 is “double-taxed,” since Gloria is taxed on it and the company she owns does not get an extra deduction as capital cost allowance or additional adjusted cost base (ACB) for the land.

Proceeds of disposition	(deemed at FMV)		
	1,400,000		
	building		land
	1,120,000		280,000
	80%		20%
Cost	825,600		168,400
Capital gain/(loss)	294,400		111,600
Total taxable capital gain		203,000	50%
Proceeds to UCC	825,600	Building costs	
UCC	627,842		
Recapture		197,758	
Additional taxable income		400,758	
Personal income taxes*		198,375	49.5%
* Gloria is currently just within the 29% tax bracket but any extra income will be in the 33% bracket. $33\% \times 1.5 = 49.5\%$ including provincial tax			

There are two ways to avoid this problem while still achieving the transfer.

The first is to do the sale at \$1.4 million, although this does not give the company the intended price break. Another option is a price of \$1 million in cash and a \$400,000 note payable, not due for a few years, so the company gets at least a temporary cash break. This will result in the same taxable income and taxes payable to Gloria, but the company will be able to depreciate 80% of \$1.4 million and add 20% of \$1.4 million to the adjusted cost base of the land. Gloria might also be able to claim a capital gains reserve for a portion of the gain until she receives the proceeds.

The other option is for Gloria to transfer the property using the provisions of subsection 85(1) of the Income Tax Act, which are rollover provisions, so that much less taxable income is triggered by the transfer. This assumes that Gloria has been holding the property for rental purposes, not as inventory for resale, and Gloria takes back at least one share from FRE, which is not difficult.

Subsection 85(1) lets Gloria elect a price for the building between the UCC and fair market value, and a price for the land between ACB and fair market value.

For example, she could transfer the property for the \$1 million cash she desires and \$400,000 worth of common shares of the company, and she could elect \$1 million as the total transfer price, allocating 80% to building and 20% to land. This would result in only \$93,000 of additional personal taxes on taxable gains and recapture of capital cost allowance, as follows:

<b>Section 85(1) transfer</b>			
<b>Proceeds of disposition</b>	<b>(elected transfer price)</b>		
	1,000,000		
	building		land
	800,000		200,000
	80%		20%
Cost	825,600		168,400
Capital gain	(25,600)	denied	31,600
Total taxable capital gain		15,800	50%
Proceeds to UCC	800,000	Building costs	
UCC	627,842		
Recapture		172,158	
Additional taxable income		187,958	
Personal income taxes		93,039	49.5%

Alternately, within the range of acceptable elected transfer prices, if the transfer price was set at the current UCC of the building and the cost of the land, there would be a capital loss on the building, which is denied, no capital gain on the land, and no recapture, so no extra taxes for Gloria.

The non-cash consideration should not exceed the elected transfer price, and the balance of the amount to reach fair market value of the property would have to be shares. Loans could be used in addition to cash, limited to the elected amount.

Gloria can decide what she wants to do, given the range of options. I believe it is best to minimize the current cash tax consequences, so she could use Section 85 to elect at the UCC and cost for the building and land, respectively, taking back more shares and less cash than originally anticipated.

The deadline to file form T2057 is the earliest date on which any of the parties to the election has to file an income tax return for the taxation year in which the transfer occurred. This means if the transfer happens before the end of calendar 2017 (but after September 30), the forms must be filed by April 30, 2018, by both Gloria and FRE.

There will be a valuation issue with respect to the shares issued if CRA disagrees with the valuation by the company. The impact of this, in terms of one-sided adjustments, could be mitigated with a price adjustment clause added to the purchase agreement.

There will also be accounting implications to this related-party transaction, which I will not cover since I have not been asked to discuss them.

One final option is simply not to make the transfer — it is not clear if there are any operational reasons to make the transfer, and this would be a lot of work to achieve relatively little benefit, especially in light of a potential sale or donation of part of the company. This might also trigger land transfer taxes, depending on the jurisdiction in which the property is held.

<b>Section 85(1) transfer</b>				
<b>Proceeds of disposition</b>	<b>(elected transfer price)</b>			
	building		land	
	627,842	Current UCC	168,400	Cost
Cost	825,600		168,400	
Capital gain/(loss)	(197,758)	denied	-	
Total taxable capital gain			-	50%
Proceeds to UCC	627,842	Building costs		
UCC	627,842			
Recapture			-	
Additional taxable income				
Personal income taxes				49.5%

For Assessment Opportunity #15 (Taxation), the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not attain the standard of reaching competence.

**Reaching competence** – The candidate identifies the impact of transferring to FRE at an amount below fair market value or recommends using Section 85 for this transaction.

**Competent** – The candidate discusses the impact of transferring to FRE at an amount below fair market value and recommends using Section 85 for this transaction.

**Competent with distinction** – The candidate calculates the impact of transferring to FRE at an amount below fair market value and recommends using Section 85 for this transaction, discussing in depth how to do so.



**APPENDIX D**

**SEPTEMBER 15, 2017 – DAY 3 SIMULATIONS,  
SOLUTIONS AND MARKING GUIDES**

**COMMON FINAL EXAMINATION  
SEPTEMBER 15, 2017 – Day 3**

**Case #1**

**(Suggested time: 90 minutes)**

When a friend gave up her job to look after her aging mother, Victoria and Isaac Green decided to create a for-profit daytime care centre for seniors, with a mission “*to provide a safe, engaging space for older adults needing care, to improve their lives and lighten their caretakers’ task.*” In 2015, the Greens incorporated the Elder Care Centre and Spa Inc. (ECCS), and they spent the year getting ready and making capital purchases. The Centre was ready in December 2015 and opened for business on January 1, 2016.

In early January 2017, ECCS obtained a \$100,000 loan from its bank, with principal repayable in 2020 and 4% interest due annually. The bank requires a copy of ECCS’s 2016 year-end financial statements, to be prepared in accordance with ASPE and reviewed by a CPA. Financial statements for 2015 are not required.

It is now January 20, 2017, and you, CPA, are the senior on the review engagement for ECCS’s first year of operations ended December 31, 2016. The engagement letter has been signed, and you have been provided with general information about ECCS (Appendix I) and the draft financial statements (Appendix II). David, your manager, asks you to prepare a planning memo that discusses some of the general considerations for the review engagement. Your memo should address the significant aspects of the business on which the engagement team should focus, materiality, as well as specific review procedures relevant to this engagement.

David mentions that the accounting records are reliable, however, there is concern about the accounting treatment of the crowdfunding contributions, and he would like you to address this issue.

David also mentions that the Greens would like help calculating ECCS’s net income for tax purposes for the 2016 corporate tax return. ECCS filed a return for 2015, opting not to claim any CCA during this period, which had no operational activity.

David asks you to also prepare a before-tax, three-year cash flow projection. The Greens would also like you to discuss performance measures that should be put in place to determine how well ECCS is meeting its mission and values.

## **APPENDIX I BACKGROUND ON ECCS**

ECCS is open approximately 260 days per year. All clients have access to the library, games room, garden, theatre, craft room, nap room, and café, where lunch is served daily. Some rooms are much busier than others. Spa services are available for an additional fee. A nurse is on site at all times.

Currently, ECCS can accommodate 30 clients daily; 20 spaces are reserved for the 20 member-clients who purchased annual memberships at \$1,000 per month, paid on the first of each month, and 10 spaces are open to drop-in clients at \$50 per day, paid on the day of their visit.

Providing an affordable alternative to the working middle-class, bringing enjoyment to older adults, and being trusted by the caretakers are all things the Greens value. ECCS considers it important to cater to clients who need ad-hoc care in addition to those needing daily care. ECCS's fees are lower than those for comparable in-home care. They are also lower than retirement or nursing home fees.

**APPENDIX II**  
**DRAFT FINANCIAL STATEMENTS**

*Elder Care Centre and Spa Inc.*  
*Income Statement*  
*For the year ended December 31, 2016*

	<u>Note</u>		
<b>Revenue</b>			
Membership fees	1	\$	240,000
Drop-in fees	2		78,000
Spa services	3		96,000
Grant	4		60,000
Crowdfunding	5		65,000
			<u>539,000</u>
<b>Operating expenses</b>			
Advertising and promotion	6		16,000
Depreciation			30,000
Food and beverages	7		57,600
Insurance			20,200
Interest on loan payable to friend	5		6,000
Interest on mortgage	5		8,700
Salaries and wages			
Salaries – owners			100,000
Salaries – nurse			50,000
Wages – spa	8		52,000
Wages – part-time staff	9		71,000
Supplies			4,650
Utilities and property tax	10		23,400
			<u>439,550</u>
<b>Income before taxes</b>		<b>\$</b>	<b><u>99,450</u></b>

**APPENDIX II (continued)**  
**DRAFT FINANCIAL STATEMENTS**

*Elder Care Centre and Spa Inc.*  
*Balance Sheet*  
*As at December 31, 2016*

	Note	
<b>Assets</b>		
Cash		\$ 49,850
Food and beverage inventory		1,200
Supplies inventory		2,500
Prepaid expenses		6,300
Property and equipment, net	5	570,000
<b>Total assets</b>		<b>\$ 629,850</b>
<b>Liabilities and shareholders' equity</b>		
Liabilities		
Accounts payable and accrued liabilities		\$ 22,000
Deferred revenue	5	20,000
Loan from friend	5	200,000
Mortgage	5	278,400
		520,400
Shareholders' equity		
Common shares	5	10,000
Retained earnings		99,450
		109,450
<b>Total liabilities and shareholders' equity</b>		<b>\$ 629,850</b>

**APPENDIX II (continued)**  
**DRAFT FINANCIAL STATEMENTS**

*Elder Care Centre and Spa Inc.*  
*Notes Related to Draft Financial Statements*

1. All 20 of the full-time, annual memberships were sold immediately. Renovations just started at ECCS and are planned to be completed in December 2017 at a total cost of \$100,000. These renovations will increase the number of full-time spots to 25 and are expected to have a useful life of 20 years.
2. Drop-in spaces were approximately 60% utilized in 2016 and are expected to be 80% utilized in 2017 and going forward. The renovations will increase the number of drop-in spaces to 15.
3. Spa services are charged out at \$80 per hour. Spa use is expected to increase by 3% per year going forward.
4. ECCS obtained a five-year operating grant from the provincial government, which has certain conditions (Appendix III). The Greens would like to know if ECCS will need to repay any of the 2016 grant amount and whether any subsequent grant amounts may need to be repaid.
5. In 2015, costs of \$600,000 were incurred: \$150,000 for land; \$405,000 for the building; \$25,000 for equipment; and \$20,000 for furniture.

Those costs were covered by a number of sources:

- Upon incorporation, the Greens contributed \$10,000 in total for 1,000 Class A common shares.
- A friend of Victoria loaned \$200,000 to the corporation. Interest is accruing at 3% annually, and the principal and cumulative interest are payable on December 31, 2025, as outlined in the agreement.
- ECCS obtained a \$305,000 fixed, 3% interest rate mortgage for the land and building from its bank. Mortgage payments are as follows for the first four years:

<b>Year</b>	<b>Principal Payments</b>	<b>Interest Payments</b>	<b>Total Payments</b>
2016	\$26,600	\$8,700	\$35,300
2017	\$27,400	\$7,900	\$35,300
2018	\$28,200	\$7,100	\$35,300
2019	\$29,100	\$6,200	\$35,300

**APPENDIX II (continued)**  
**DRAFT FINANCIAL STATEMENTS**

*Elder Care Centre and Spa Inc.*  
*Notes Related to Draft Financial Statements*

- In early 2016, the community responded well to a one-time crowdfunding request, contributing \$85,000. Two types of contributions were possible:

<b>Contribution</b>	<b>Benefit Received by Contributor</b>	<b>Total Funds Raised</b>
\$20	None	\$45,000
\$200	Voucher for one-hour spa service, with a value of \$80	\$40,000

- Contributions of \$20 were recorded directly to crowdfunding revenue when received.
  - Contributions of \$200 were fully recorded as deferred revenue when received. One-half of the 200 vouchers originally issued have been used to date, and the amount was transferred to crowdfunding revenue during the year.
6. Included in this amount is a contribution to a political party for \$2,500, meals and entertainment of \$1,500 and a \$500 golf club membership. In future years, ECCS expects to spend one-half of the amount it spent in 2016 on advertising and promotion.
  7. Food and beverages relate to the lunch served to clients each day.
  8. Spa employees earn \$40 per hour.
  9. After the renovations, the total of “wages – part-time staff” is expected to increase by 25% in 2018, and then remain at that level.
  10. After the renovations, the total of “utilities and property tax” is expected to increase by 15% in 2018, and then remain at that level.

**APPENDIX III  
EXTRACTS FROM PROVINCIAL GRANT AGREEMENT**

- Beginning on January 1, 2016, ECCS will receive \$60,000 per year, for five years. The annual grant is designed to fund operations, and not capital expenditures; i.e., to provide liquidity to ECCS in its start-up phase.
- In the event that ECCS does not need this funding to maintain its operations, a portion of the grant will be clawed back. Therefore, each year, ECCS will have to repay the percentage of that year's grant (Column B) if each individual threshold (Column A) is reached, up to a maximum of 100%:

<b>Column A Threshold</b>	<b>Column B Repayment of Grant (claw-back)</b>
If all sources of revenue and other income, excluding this grant, exceed \$500,000	30%
If income before taxes, excluding this grant and owners' salaries, exceeds \$160,000	40%
If capital expenditures exceed \$20,000	30%

- Any repayment required is due by April 15 of the following year.



**MARKING GUIDE 3-1**  
**ELDER CARE CENTRE AND SPA (ECCS)**  
**ASSESSMENT OPPORTUNITIES**

Memo

To: David, Manager  
From: CPA  
Re: Elder Care Centre and Spa (ECCS)

**Assessment Opportunity #1 (Depth and Breadth Opportunity)**

The candidate provides a cash flow projection for the next three years.

*The candidate demonstrates competence in Management Accounting.*

**CPA Map Competencies:**

*3.2.1 Develops or evaluates information inputs for operational plans, budgets, and forecasts (Core – Level A)*

*3.2.2 Prepares, analyzes, or evaluates operational plans, budgets, and forecasts (Core – Level A)*

I have prepared a cash flow projection for ECCS for the next three years based on the information you provided.

**ECCS – Cash Flow Projections (3 Years)**

<b>Cash Inflows</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>Note</b>
Revenue – memberships	\$240,000	\$300,000	\$300,000	1
Revenue – drop-ins	104,000	156,000	156,000	2
Revenue – spa services	98,880	101,846	104,902	3
Total revenue	442,880	557,846	560,902	
Grant	60,000	60,000	60,000	4
Bank financing	100,000	0	0	
Total cash inflows	602,880	617,846	620,902	
<b>Cash Outflows</b>				
Renovations	100,000	0	0	
Grant claw-back	0	18,000	42,000	4
Advertising and promotion	8,000	8,000	8,000	5
Food and beverage	62,031	81,969	81,969	6
Insurance	20,200	20,200	20,200	
Mortgage payments	35,300	35,300	35,300	7
Interest on loan from friend	0	0	0	8
Bank loan interest	4,000	4,000	4,000	9
Salaries – owners	100,000	100,000	100,000	
Salaries – nurse	50,000	50,000	50,000	
Wages – spa	53,440	50,923	52,451	10
Wages – part-time staff	71,000	88,750	88,750	11
Supplies	4,650	4,650	4,650	
Utilities and property taxes	23,400	26,910	26,910	12
Total cash outflows	532,021	488,702	514,230	
Total cash flow before taxes	\$70,859	\$129,144	\$106,672	

**Notes:**

- 2017: \$1,000 per month × 12 months × 20 members  
2018 & 2019: \$1,000 per month × 12 months × 25 members
- 2017: 10 spots × \$50 a day × 80% utilized × 260 days a year  
2018 & 2019: 15 spots × \$50 a day × 80% utilized × 260 days a year
- 2017: \$96,000 in 2016 × 1.03 (3% growth)  
2018: \$98,880 × 1.03 (3% growth)  
2019: \$101,846 × 1.03 (3% growth)

4. As per later discussion, there is an \$18,000 claw-back in 2017, paid on April 15, 2018, and a \$42,000 claw-back in 2018, paid on April 15, 2019.
5.  $\$16,000 \times 50\%$
6. 2017:  $\$57,600 \text{ in } 2016 \div 26 \text{ clients} \times 28 \text{ clients}$   
2018 & 2019:  $\$57,600 \text{ in } 2016 \div 26 \text{ clients} \times 37 \text{ clients}$
7. As per schedule provided.
8. No interest on the loan from the friend since it is only payable in 2025.
9.  $\$100,000 \times 4\%$
10. Spa service revenue  $\times 50\%$  (employees earn \$40 per hour versus charge out \$80 per hour) and 100 vouchers left to redeem at \$40 per hour. It is assumed the vouchers will be redeemed in 2017.  
2017:  $\$98,880 \times 50\% + (100 \times \$40) = \$53,440$   
2018:  $\$101,846 \times 50\% = \$50,923$   
2019:  $\$104,902 \times 50\% = \$52,451$
11. 2018 & 2019:  $\$71,000 \text{ from } 2016 \times 1.25$  (expected increase after renovations)
12. 15% increase after renovations, as per case facts  
2017 & 2018:  $\$23,400 \text{ in } 2016 \times 1.15$

For Assessment Opportunity #1, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts a cash flow projection.

**Competent** – The candidate provides a reasonable three-year cash flow projection.

**Competent with distinction** – The candidate provides a thorough three-year cash flow projection.

**Assessment Opportunity #2 (Depth and Breadth Opportunity)**

The candidate discusses accounting for the crowdfunding contributions.

*The candidate demonstrates competence in Financial Reporting.*

**CPA Map Competencies:****1.2.3 Evaluates treatment for non-routine transactions (Core – Level B)**

In early 2016, ECCS received contributions as part of a crowdfunding campaign. To entice contributions, ECCS provided donors who contributed \$200 with a voucher that was good for one hour of spa services. For donors contributing \$20, ECCS provided nothing in return.

ASPE does not have any specific guidance on crowdfunding or monetary contributions. However, we can draw from the financial statement concepts section (Section 1000) to help determine the accounting treatment for the contributions.

**Contributions of \$20**

ECCS has accounted for the \$20 contributions as revenue immediately. This transaction doesn't stem from the sale of a good or service, or the use of an enterprise resource yielding interest, royalties, or dividends, and, therefore, does not fit the definitions of revenue included in 3400.01. However, the \$20 contribution fits the definition of a gain, as per Section 1000, paragraph 34: *"Gains are increases in equity from peripheral or incidental transactions and events affecting an entity and from all other transactions, events and circumstances affecting the entity except those that result from revenues or equity contributions."*

As per paragraph 39,

*The recognition criteria are as follows:*

- (a) the item has an appropriate basis of measurement and a reasonable estimate can be made of the amount involved; and*
- (b) for items involving obtaining or giving up future economic benefits, it is probable that such benefits will be obtained or given up.*

In the case of the \$20 contribution, criterion a) is met since the contribution is \$20, which is the amount received. Criterion b) does not apply; there are no future economic benefits to be obtained or given up, since the contributor receives no benefits.

Paragraph 43 also specifies that *"gains are generally recognized when realized."*

Therefore, recording the \$20 contributions when collected is appropriate. However, they should be presented as a gain in the "Other income" section of the income statement.

## Contributions of \$200

ECCS has accounted for these contributions as deferred revenue, and when vouchers are used, ECCS transfers the amount from deferred revenue to revenue.

According to HB 3400 paragraph 11,

*The recognition criteria in this Section are usually applied separately to each transaction. However, in certain circumstances, it is necessary to apply the recognition criteria to the separately identifiable components of a single transaction in order to reflect the substance of the transaction. A single sales transaction may involve the delivery or performance of multiple products, services, or rights to use assets, and performance may occur at different points in time or over different periods of time. In some cases, the arrangements include initial installation, initiation, or activation services and involve consideration in the form of a fixed fee or a fixed fee coupled with a continuing payment stream. For example, when the selling price of a product includes an identifiable amount for subsequent servicing, that amount is deferred and recognized as revenue over the period during which the service is performed. Conversely, the recognition criteria are applied to two or more transactions together when they are linked in such a way that the commercial effect cannot be understood without reference to the series of transactions as a whole. For example, an entity may sell goods and, at the same time, enter into a separate agreement to repurchase the goods at a later date, thus negating the substantive effect of the transaction. In such a case, the two transactions are dealt with together.*

Following the *Handbook* guidance, the contribution and the spa service should be recorded separately. We then need to determine the correct timing and the amount at which to record each component of the transaction. Since the spa treatments are sold for \$80 per hour, it would seem most reasonable to allocate the fair market value of \$80 to the deferred spa service revenue. The remaining \$120 would be recorded as income (gain), as per the preceding discussion about the \$20 contribution level.

According to HB 3400, paragraph 4,

*Revenue from sales and service transactions shall be recognized when the requirements as to performance set out in paragraphs 3400.05-.06 are satisfied, provided that at the time of performance ultimate collection is reasonably assured.*

And in paragraph 3400.05,

*In a transaction involving the sale of goods, performance shall be regarded as having been achieved when the following conditions have been fulfilled:*

- (a) The seller of the goods has transferred to the buyer the significant risks and rewards of ownership, in that all significant acts have been completed and the seller retains no managerial involvement in, or effective control of, the goods transferred to a degree usually associated with ownership; and*

*(b) Reasonable assurance exists regarding the measurement of the consideration that will be derived from the sale of goods, and the extent to which goods may be returned.*

Following the *Handbook* guidance, we determine that for the \$80 portion, collection is assured because the funds are collected up front and have been received, and measurement is estimable because we know the amount of the contribution, since it has been received. However, performance would entail honoring the voucher and providing the spa service, which does not occur until a later date. As a result, revenue associated with the \$80 portion of the \$200 contribution cannot be recognized until the spa service is provided.

Applying this treatment to 2016, there would be  $\$80 \times 200 \text{ vouchers} \times 50\% \text{ unused} = \$8,000$  in deferred revenue. The other \$12,000 currently in deferred revenue would be recorded as crowdfunding income instead. On that note, it would be more informative to show all spa service revenue on that line, so the amount of crowdfunding income would only be  $\$45,000 + (\$40,000 - (\$80 \times 200)) = \$69,000$ , and the spa services revenue line would show  $\$96,000 + \$8,000 = \$104,000$ .

For Assessment Opportunity #2, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate discusses the accounting for the crowdfunding contributions at the \$20 level, or attempts to discuss the contributions at the \$200 level.

**Competent** – The candidate provides a reasonable discussion of the accounting for the crowdfunding contributions, recognizing the separate components of the \$200 contributions.

**Competent with distinction** – The candidate provides a thorough discussion of the accounting for the crowdfunding contributions at the \$20 and \$200 levels.

**Assessment Opportunity #3 (Breadth Opportunity)**

The candidate calculates whether the grant will be subject to a claw-back.

*The candidate demonstrates competence in Finance.*

**CPA Map Competencies:**

*5.2.3 Evaluates sources of financing (Core – Level B)*

**First Threshold – Revenue**

ECCS must repay 30% of the grant if all of its annual sources of revenue and income, excluding the grant, exceed \$500,000.

The changes recommended previously with regards to accounting for the crowdfunding contributions in 2016 mean income will increase to \$551,000 (\$539,000 + \$12,000). This would be \$491,000 of income before considering the grant (\$551,000 – \$60,000), which is just under the grant claw-back threshold, meaning there would be no claw-back of the grant as a result of these changes.

Based on our projections, 2017 should also be onside. The cash flows related to revenue for 2017 are \$442,880, based on the cash flow calculation at the beginning of this memo. Assuming that all of the 100 outstanding vouchers in 2016 are redeemed in 2017, it will add \$8,000 of revenue to the cash flows already calculated, for total revenue of \$450,880 in 2017. This is still under the \$500,000 threshold. However, based on the cash flow projections for 2018 and 2019, you can see that after the renovations, ECCS's revenue will go beyond \$500,000 before the grant revenue is considered, resulting in a 30% claw-back. There will be an \$18,000 ( $\$60,000 \times 30\%$ ) repayment in 2019 (for 2018), in 2020 (for 2019), and in 2021 (for 2020) as a result of this claw-back.

**Second Threshold – Income before Taxes**

ECCS must repay 40% of the grant if its income before taxes, excluding the grant and owners' salaries, exceeds \$160,000.

Income before taxes was \$99,450 according to the draft financial statements. With the adjustment of \$12,000 to revenue previously discussed, it brings income before taxes up to \$111,450. If we exclude the grant and owners' salaries, we get income of \$151,450 ( $\$111,450 - \$60,000 + \$100,000$ ). Therefore, it does not appear that ECCS was offside for 2016.

Below is the projection of income before taxes, excluding the grant and owners' salaries, for the following years:

**ECCS – Income before Taxes Projections (Excluding the Grant and Owners' Salaries) –  
3 Years**

	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>Note</b>
Total cash flow before taxes	\$ 70,859	\$129,144	\$106,672	
Minus:				
Depreciation	30,000	35,000	35,000	1
Interest on loan from friend	6,000	6,000	6,000	2
Grant	60,000	60,000	60,000	
Bank financing	100,000	0	0	
Plus:				
Spa revenue related to vouchers	8,000	0	0	3
Renovations	100,000	0	0	
Mortgage principal payments	26,600	27,400	28,200	4
Grant claw-back	0	18,000	42,000	
Salaries – owners	100,000	100,000	100,000	
Income before taxes	<u>\$109,459</u>	<u>\$173,544</u>	<u>\$175,872</u>	

**Notes:**

1. Depreciation of \$30,000, as per financial statements, adding depreciation of renovation costs: \$100,000 depreciated over 20 years ( $\$100,000 \div 20 \text{ years} = \$5,000$ ), with depreciation starting in 2018, since the renovations will be completed in December 2017.
2. Interest on loan from friend:  $\$200,000 \times 3\% = \$6,000$ .
3. Spa revenue to be recognized in 2017 for the 100 vouchers unused in 2016, assuming they will be used in 2017.
4. As per schedule provided.

Given these projections of income before taxes, ECCS should remain onside for 2017. However, in 2018 and 2019, after the renovations, ECCS's income before taxes, and excluding the grant and the owners' salaries, is projected to exceed \$160,000, and ECCS will be subject to a 40% claw-back of the \$60,000 grant. There will be a \$24,000 ( $\$60,000 \times 40\%$ ) repayment in 2019 (for 2018), in 2020 (for 2019), and in 2021 (for 2020).



### Third Threshold – Capital Expenditures

ECCS must repay 30% of the grant if its capital expenditures exceed \$20,000 in a year.

As per the December 31, 2016, draft financial statements, it does not look like any funds were spent on capital expenditures in 2016, since the ending balance is equal to the acquisitions in 2015 less depreciation taken in 2016 (i.e., \$600,000 – \$30,000 = \$570,000). All capital expenditures seem to have been incurred prior to the start of operations. However, the forecasted cost of the renovations to be completed in 2017 is \$100,000, which is above the \$20,000 threshold. ECCS will, therefore, be offside in 2017. Future plans do not include any major capital spending in the next few years, so it is assumed ECCS will be onside in 2018 and until the end of the grant agreement. There will, therefore, be an \$18,000 ( $\$60,000 \times 30\%$ ) repayment in 2018 (for 2017) only.

In summary, ECCS appears to be onside for the year ended December 31, 2016, for all three thresholds, and, therefore, there would be no repayment of any amount related to the operating grant. However, in 2017, the third threshold will likely be met (maximum of \$20,000 of capital expenditures per year). A repayment of \$18,000 should be expected in 2018 (for 2017). A repayment of \$42,000 should also be expected in years 2019 (for 2018), 2020 (for 2019), and 2021 (for 2020), due to the first two thresholds being met.

For Assessment Opportunity #3, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts to determine whether the grant will be subject to a claw-back due to the occurrence of any of the three thresholds contained in the grant agreement.

**Competent** – The candidate determines whether the grant will be subject to a claw-back due to the occurrence of any of the three thresholds contained in the grant agreement.

**Competent with distinction** – The candidate determines whether the grant will be subject to a claw-back due to the occurrence of any of the three thresholds contained in the grant agreement and concludes on the potential for repayment.

**Assessment Opportunity #4 (Breadth Opportunity)**

The candidate prepares a review engagement planning memorandum.

*The candidate demonstrates competence in Audit and Assurance.*

**CPA Map Competencies:**

*4.3.4 Assesses materiality for the assurance engagement or project (Core – Level B)*

*4.3.5 Assesses the risks of the project, or, for audit engagements, assesses the risks of material misstatement at the financial statement level and at the assertion level for classes of transactions, account balances, and disclosures (Core – Level B)*

**First Review and First Year of Operations**

This will be our first time performing a review engagement for ECCS, so we will need to obtain sufficient knowledge of the business to enable us to make appropriate inquiries and assess the plausibility of the information provided. Since this is the first year of operations for ECCS, there is no prior year information to compare this year's results to. We will have to find other ways in which to assess the plausibility of the financial statements. In addition, because this is the company's first year of operations, opening balances are not a concern except for property, plant and equipment, which were purchased in 2015.

**Significant Aspects of the Business**

While the accounting has been said to be reliable, the crowdfunding income has unique conditions and may be accounted for incorrectly. We will need to pay attention to the accounting of the crowdfunding contributions.

The potential grant claw-back could also be accounted for incorrectly or cause the owners to manipulate the financial statements in order to avoid the claw-back. We will need to keep this in mind during our review.

The operational revenue streams (memberships paid monthly, daily drop-in rates) and expense streams seem to be fairly straightforward, and the owners are heavily involved in the day-to-day operation of the business. It should not be difficult to perform review procedures on this portion. Therefore, the focus of the review should be on the crowdfunding income, the grant and its conditions, and the bias the owners might have in the accounting treatments in general to ensure the grant does not get clawed back.

**Approach**

Given this is a review engagement, the approach will include inquiry, discussion, and analytical procedures, as shown in the procedures discussed in the following section.

## Materiality

Although materiality is not specifically required in the review engagement standards, it implicitly needs to be calculated to report that nothing has come to our attention that causes us to believe these financial statements are not, in all material respects, in accordance with ASPE.

The financial statement users include the following:

- a) Victoria and Isaac Green, who overall wish to make profit, but who may be interested in showing lower revenue and net income to maximize the amount of the grant. They would also be interested in minimizing income in order to reduce the tax liability for ECCS.
- b) The bank and the friend who provided a loan, who care about profitability and cash flows because they are indicators of ECCS's ability to repay both the mortgage and the new loan.
- c) The provincial government, which cares about the amount of revenue and net income in order to ascertain whether the grant will be subject to claw-back.

As a for-profit enterprise, the typical basis for materiality calculation, income before taxes, would certainly be appropriate. In this case, given the provincial government grant, revenue would also be an appropriate benchmark. Regardless of the basis, given the number of users and their interest, materiality should be set on the lower side. I've calculated materiality below using both revised revenue and revised income before taxes, and taking out the crowdfunding revenue, which is not recurrent. I also took out the spa wages that are related to the 100 vouchers redeemed (100 × \$40 per hour):

Revenue (\$539,000 – \$65,000):  $\$474,000 \times 1\% = \$4,740$

Income before taxes ( $\$99,450 - \$65,000 + \$4,000$ ) =  $\$38,450 \times 5\% = \$1,923$

Materiality of around \$2,000 is recommended for the engagement.

For Assessment Opportunity #4, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate discusses either general considerations or materiality, or the candidate attempts a discussion of both.

**Competent** – The candidate discusses general considerations and materiality.

**Competent with distinction** – The candidate thoroughly discusses general considerations and materiality.

**Assessment Opportunity #5 (Breadth Opportunity)**

The candidate provides review procedures.

*The candidate demonstrates competence in Audit and Assurance.*

**CPA Map Competencies:**

*4.3.6 Develops appropriate procedures based on the identified risk of material misstatement (Core – Level B)*

Unfortunately, there are no prior year numbers to compare against for analytical procedures since it is the first year of business. We will have to determine our expectations based on other information.

**Revenue:**

Membership revenue: Ask Victoria and Isaac how many full-time spaces they have available (confirm 20), when they sold out (confirm immediately in January), and their price (confirm \$1,000). Perform analytical procedure by multiplying the annual fee by the number of members to ensure the amount of revenue in the financial statements is plausible.

Drop-ins: Discuss with front-desk staff how many drop-in clients they have daily on average (confirm  $10 \times 60\% = 6$ ) and the price of a drop-in client (confirm \$50). Perform analytical procedure with this information to ensure the amount presented in the financial statements is plausible.

Spa service revenue and wages: Discuss with spa staff how many hours on average they work per day and how much a spa service costs (confirm \$80 per hour), and assess plausibility of spa revenue. Also, inquire as to how much they are paid per hour (verify \$40 per hour) and perform analytical procedures with this information to ensure the wage expense is plausible.

Grant revenue: Could discuss nature and terms of grant with Victoria and Isaac, but given the risk around the claw-back, it would likely be appropriate to obtain a copy of the grant agreement to ensure we understand the terms.

Crowdfunding income and deferred revenue: Discuss campaign, contribution levels, and income earned with Victoria and Isaac. Inquire with spa staff regarding how many vouchers were given out (confirm 200) and how many have been redeemed (confirm 50%). Calculate the amount of expected deferred revenue. It may be useful to see if any crowdfunding campaign advertisement is still around, to see the details of the levels.

**Expenses**

Advertising: Discuss nature of advertising done with Victoria and Isaac to gain comfort that \$16,000 is a plausible amount.

Depreciation and property and equipment: Discuss assets purchased, amounts spent, and useful lives of assets (building, equipment, furniture) with Victoria and Isaac to ascertain if reasonable. Perform depreciation calculation and compare to client's calculation to see if expense recorded is appropriate.

Food and beverage: Inquire with Victoria and Isaac about the amount spent on an average meal per client. Perform analytical procedure by multiplying the amount by the number of days and clients, and compare to what has been recorded in the financial statements.

Insurance: Discuss insurance policy and coverage with Victoria and Isaac, to help determine if it is both plausible and sufficient.

Interest and loans/mortgage payable: Discuss loan agreements with Victoria and Isaac, terms of repayment, principal amounts, and interest rates. Perform an interest calculation to determine if plausible.

Salaries and wages: Inquire with Isaac and Victoria as to the amount of salary they each took out of the business. Inquire with the nurse as to his or her salary. Inquire with part-time staff as to their wage rates and how many hours each of them works on average. Perform analytical procedure for part-time staff wages to ensure they are plausible (wage rate  $\times$  average number of hours worked per day  $\times$  260 days). See spa staff wages in previous spa revenue discussion.

Supplies and supply inventory: Discuss nature of items purchased and expensed in this account with Victoria and Isaac to determine if it is plausible. Discuss how they determined value in supply inventory at year end (e.g., did they count it?).

Utilities and property tax: Inquire with Victoria and Isaac as to average monthly utility bill (multiplied by 12) and annual property tax bill.

Income tax expense: Currently, no income tax expense has been recorded on the financial statements. The client will have to record an expense before we can review it. Once this is done, we can compare the amount of the expense to the net income for tax purposes calculation we prepared, multiplied by an appropriate rate.

**Balance Sheet Accounts (not already dealt with within income statement items above)**

Cash: Discuss with bookkeeper whether she or he performs bank reconciliations monthly, whether they are reviewed by another party, and, if so, who this person would be. Although unnecessary, it would be easy and appropriate to obtain a copy of the December 2016 bank statement.

Food/beverage inventory: Discuss with staff who work in the café whether they performed a count at year end. Inquire as to the nature of food on hand at year end and whether any food had spoiled.

Prepaid expenses: Discuss with bookkeeper what makes up this account.

Accounts payable: Discuss with bookkeeper what makes up this account and how old the payables are. Inquire as to any invoices that came after year end and whether they have been included in this account. Discuss with Victoria and Isaac whether they know of any outstanding amounts payable that have not yet been included.

Common shares: We could inquire with Victoria and Isaac with regards to the initial contribution to ECCS and the number of shares issued, but it would be easiest if we obtained copies of the share certificates. These would be good items to have for the permanent file, in any case.

For Assessment Opportunity #5, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate identifies a few review procedures to be performed.

**Competent** – The candidate discusses some review procedures to be performed.

**Competent with distinction** – The candidate discusses several review procedures to be performed.

**Assessment Opportunity #6 (Breadth Opportunity)**

The candidate calculates net income for tax purposes.

*The candidate demonstrates competence in Taxation.*

**CPA Map Competencies:**

*6.1.2 Determines taxes payable for a corporation in routine situations (Core – Level B)*

**Net Income for Tax Purposes Calculation (T2, Schedule 1)**

		<b>Note</b>
Income before taxes for 2016 per financial statements	\$ 99,450	
F/S adjustments made related to crowdfunding		
\$200 category	12,000	1
Revised income before taxes	<u>111,450</u>	
Add back:		
Depreciation	30,000	
50% meals and entertainment	750	2
Golf dues	500	3
Political contribution	2,500	4
Deferred revenue	8,000	1
Deduct:		
CCA	(33,300)	5
Reserve for unearned amounts	<u>(8,000)</u>	1
Net income for tax purposes	<u>\$ 111,900</u>	

**Notes:**

1. See financial reporting discussion (\$20,000 – \$8,000 deferred = \$12,000 adjustment). The CRA generally considers funds received from crowdfunding as business income when the funds are received by a taxpayer who carries on a business, “unless it can be shown that the crowdfunding arrangement otherwise clearly represents a loan, capital contribution or other form of equity” (CRA Rulings Document No. 2015-057903). After the adjustment made to the financial statements, the only income related to crowdfunding not recorded in income is the \$8,000 deferred revenue (which is added into income in the T2, Schedule 1, reconciliation and then deducted as a reserve for services not performed as allowed by the Income Tax Act).
2. Given that the food and beverages served for lunch for clients in the café are similar to the food served by a restaurant, this expense deduction is not limited to a 50% deduction like other meals and entertainment (ITA 67.1). Therefore, only the \$1,500 spent on meals and entertainment is limited to a 50% deduction (\$1,500 × 50%).

3. Golf dues are not deductible under 18(1)(l).
4. Political contributions are not deductible under 18(1)(n).

5. CCA

Building (Class 1 - 6%)	\$ 24,300	\$405,000 x 6%
Furniture (Class 8 - 20%)	4,000	\$20,000 x 20%
Equipment (Class 8 assumed - 20%)	5,000	\$25,000 x 20%
	<u>\$ 33,300</u>	

Given the building, furniture, and equipment were purchased and available for use in 2015 (the centre was ready in December 2015), the half-year rule would not apply in 2016. However, since no CCA was taken in 2015, the UCC balances in each class are still at their original costs.

### Other Comments

Both interest expense amounts (the amount payable on the loan from Victoria's friend and the amount on the mortgage) will be fully deductible in the year incurred because the borrowings were made to purchase capital items used in the business (ITA 20(1)(c)).

For Assessment Opportunity #6, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts a calculation of net income for tax purposes.

**Competent** – The candidate provides a reasonable calculation of net income for tax purposes.

**Competent with distinction** – The candidate provides a thorough calculation of net income for tax purposes.



**Assessment Opportunity #7 (Breadth Opportunity)**

The candidate discusses performance measures for this type of business.

*The candidate demonstrates competence in Strategy and Governance.*

**CPA Map Competencies:**

*2.3.1 Evaluates the entity's strategic objectives and related performance measures  
(Core – Level B)*

In order to assess how ECCS is doing, we will consider performance measures, keeping in mind its mission, “to provide a safe, engaging space for older adults needing care, to improve their lives and lighten their caretakers’ task,” and also its values, “providing an affordable alternative to the working middle-class, bringing enjoyment to older adults, and being trusted by the caretakers.”

ECCS has various stakeholders. The direct client is the older adult, for whom ECCS is trying to offer safety and enjoyment. The indirect client is the older adult’s caretakers, for whom ECCS is trying to offer an affordable, trusted service, catering to clients who need ad hoc care in addition to those needing daily care. The employees have not been mentioned in ECCS’s mission or values but will be considered below (and perhaps should be more explicitly considered). Finally, Victoria and Isaac need to run a business that is profitable enough to sustain their quality of life, but high profits do not seem as important to them as their service offering.

**Safety**

In terms of safety, ECCS should keep track of the number of times a safety incident happens to a client or an employee, where it happens, and who is involved, in order to make necessary changes to their operations to improve safety. This might already be happening for employees, for worker compensation insurance reasons, but it would be beneficial to also keep track of the incidents involving clients, to help satisfy this particular aspect of the mission.

Complaints made and filed by employees, clients, or caretakers may also relate to safety and could be used as an information source to track incidents.

A benchmark could be set indicating an acceptable level (understanding that some incidents are inevitable).

In addition, ECCS has stated that it always has a nurse on site, and this could be an important element in providing a safe environment. It would make sense to make sure that one on-site nurse is sufficient to provide the clients with the care they need. This could be accomplished by comparing ECCS’s nurse-to-client ratio with industry statistics or with those of other seniors’ or nursing homes in the area. The survey mentioned below could also include a question on whether the clients required the care of a nurse during their stay and whether they received the care needed at that time.

### **Engaging Space**

As a qualitative consideration, the best way to gather information and assess how ECCS is performing on this level would be to survey the clients. The 20 full-time member-clients would be a fairly reliable source to survey, and if there are any drop-in clients that come regularly enough, they should also be polled.

It would be beneficial to know which services in particular they find most enjoyable and why or why not (e.g., theatre, garden, games room, etc.), especially since they've noted that some spaces are busier than others. This information would help them determine if they need to expand a space (and which space could be reduced) and increase staff in a particular space (potentially at a particular time of day), as well as to make other decisions, such as whether to increase the games selection or improve the mattresses in the nap room, for instance. Annual surveys should be conducted.

### **Improve Lives and Bring Enjoyment to Older Adults**

Similar to the previous point, the best way to gather information about these goals would be to survey the clientele. Both full-time and drop-in clientele could be surveyed and asked to rate on a scale their level of enjoyment during their time with ECCS, as well as to rate whether they feel their lives have improved as a result of their time with ECCS and to what degree.

### **Trust, Affordability, and Lightening Caretakers' Task**

The caretakers are trusting ECCS with a beloved family member at a significant cost. Indicators of trust, affordability, and whether ECCS has been successful in "lightening the task" of caretakers would include retention rates for both drop-in clients (i.e., what percentage of drop-ins are returning clients?) and annual member-clients (do they sign up again?). Annual member-clients who do not renew should be asked why they have chosen not to return, since their reason may be indicative of ECCS's service or affordability, but it might be related to something else entirely, such as the concern that more significant medical attention is required day-to-day than ECCS offers.

It would once again be valuable to survey the caretakers to ensure the service is meeting their needs and whether there are areas for improvement.

The following should also be monitored to ensure the services remain affordable:

- Occupancy rates; i.e., what proportion of annual member spots are full and what proportion of the drop-in spots are used regularly.
- Cost management. Since keeping rates affordable is important to ECCS, one way that can help the company do so and keep profits up is to manage costs efficiently. Costs should be compared to budget and to prior year, and variances should be analyzed.
- Comparison of the rates charged by ECCS with those of nearby retirement or nursing homes to see how affordable ECCS is compared to the alternatives.

### **Ad Hoc Care Availability**

ECCS has stated that it is important to the company to offer ad hoc care in addition to providing full-time care to those who require it. In order to assess whether ECCS is meeting this goal, the company could look at the utilization rate for the drop-in spaces. This would allow management to determine whether clients are making use of the drop-in spaces and allow them to evaluate whether they are offering sufficient spaces for this client type. Statistics on average monthly utilization, as well as the maximum and minimum number of spaces filled, could be compared on a month-by-month basis.

### **Employee Satisfaction**

Although not specifically identified by the Greens as part of their mission or values, the employees are a stakeholder of the business who could be considered, especially since their one-on-one interaction with the clients daily could have an impact on the clients' enjoyment and retention.

Wage comparison to industry should be performed annually or at least every few years to ensure ECCS is paying its various employees competitively. Employment satisfaction surveys could be used to ensure employees are enjoying their work and identify what improvements could be made. Employment turnover rates should be calculated annually and compared to industry and prior years.

For Assessment Opportunity #7, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts to discuss some performance measures, tying them to the mission and values.

**Competent** – The candidate discusses some performance measures, tying them to the mission and values.

**Competent with distinction** – The candidate discusses several performance measures, tying them to the mission and values.

**Case #2****(Suggested time: 80 minutes)**

Roxanne Kalpert, who is married and has two sons, aged two and four years old, is a long-time tax client of yours. A work-at-home mom, Roxanne posts videos of baby products on an Internet viewing channel, where she discusses products such as strollers and cribs and demonstrates features of various brands. Roxanne's business is unincorporated. She receives revenue from advertisements, which are displayed before her video is shown. Her target market is new parents, particularly millennials, who often do a lot of online research before purchasing major items for their children.

Roxanne knows that being a new parent can be difficult and believes her work makes people's lives easier. Although she does not have a business background, she has been successful in significantly growing her business while interacting with other parents and fulfilling her goal of helping them choose the best products for their needs. She can now make a living from what she enjoys doing. New opportunities have been presented to Roxanne lately, and she must decide whether to pursue them.

Today is February 1, 2017. You, CPA, a sole practitioner, meet with Roxanne at her request.

"CPA, I am so glad to see you! There has been so much going on that I need help with more than just my taxes this time. First, as much as I like helping parents, I have always wanted to write a book. I pitched the idea of a humorous book full of my personal experiences raising my sons, and a publisher is willing to publish it! I think this would be a good opportunity to get my name out there to help increase the popularity of my viewing channel. I have to decide whether to publish a printed book or an e-book. I can't do both. The publisher gave me some information on each format available (Appendix I). Can you tell me which format looks most profitable? Also, are there any other decision factors I should consider in deciding between the printed book and e-book?"

"At the baby products conference this year, I reconnected with a businessman, John, who is interested in investing in my channel. He owns a line of baby products, such as bottles and sippy cups. We have had some heated arguments in the past. For example, he thinks many baby product recalls are unnecessary and are mainly due to misuse of the product. In contrast, I firmly believe babies should be protected even if there is a very small risk of danger. However, John has many years of business experience. He is willing to invest \$200,000 for 40% of the channel's profit. Can you tell me whether this is a fair price? Here is my financial information for 2016 (Appendix II), as well as some industry information (Appendix III).

“I am worried these new ventures might distract me from my initial goals, my values, and my reasons for starting the viewing channel. This is all happening so fast. I would appreciate knowing what other factors you think I should consider in deciding whether to move forward with the book and whether or not to accept John’s investment offer.

“And finally, there are my taxes. I got a letter from the Canada Revenue Agency last week saying they will be auditing my 2015 personal income taxes. What are they likely worried about? Can you give me examples of specific procedures they will likely be doing? And for my 2016 tax filing, I would like you to estimate my federal taxes payable.

“By the way, my husband just accepted a one-year job in the United States starting in June 2017. The boys and I will not be moving with him, and he plans to return to Canada when the year is up. Can you explain to me some of the factors that will impact the determination of his residency status for Canadian tax purposes? I would also like to know how the income he earns in the U.S. will be taxed in Canada.”

## APPENDIX I INFORMATION ON BOOK FORMATS

### Printed Book

- The retail price is fixed at \$25 per book. At this price, it is estimated that 40,000 copies will be sold, which would be the number of books to be printed for the first edition.
- The costs involved for the first edition are as follows:
  - 50% of the retail price goes to the book sellers.
  - \$7 per book goes to the publisher, to cover overhead, marketing, and other expenses.
  - The marketing costs include the organization of optional book signing sessions in different cities.
  - A \$12,000 fixed amount goes to the distributor, who deals with the book sellers.
  - A \$3,000 fixed amount, plus an additional \$2 per book, goes to the printer for print setting and printing, respectively.
- Some of the fixed costs would apply again if a second edition had to be printed.

### E-book

- E-books are usually priced at 40% of the equivalent printed book version in order to achieve the same sales volume. E-books can't be shared easily between readers, so readers are not willing to pay as much for them. However, the publisher said that I could set a price of my own. Based on his experience, it is possible to sell 20,000 more books if I set the price at 30% of the printed book version price. What impact would the different prices have on my overall book profit?
- The costs involved are as follows:
  - 55% of the retail price goes to the publisher, who is also responsible for sales and distribution.
  - \$1 per book goes to the Electronic Media Board as a licensing fee.
  - A \$20,000 fixed fee goes to the programmer, who makes the book content compatible with the various e-book platforms.

The publisher explained that although the fixed costs are higher for the e-book, the variable costs are lower because we are not chopping down trees. It is also much easier with the e-book to make changes once it is published, since no re-printing of editions is needed. He is willing to provide free publicity on his website if I go with the e-book format. He noted that the e-book would provide a lot of exposure for me, since the e-book format is gaining in popularity, especially with young readers. However, if I go with the printed book version, distribution will be relatively easy since he is well-established and already has all of the distribution channels in place.

**APPENDIX II**  
**FINANCIAL INFORMATION FOR 2016**

- Revenue for 2016 was \$270,000, entirely from advertisements on my channel that are displayed prior to the videos being aired, and directly related to the number of times the videos are viewed. I had an exceptionally good year – one video that I posted, showing my sons dancing to a popular song, went viral, getting over 10 million views. As I only have about 90,000 subscribers on my channel, I was very surprised by this. I doubt that I will ever have that kind of ad revenue again, given that viral videos are very rare.
- Expenses for the year were as follows:
  - \$53,000 – Attendance at the annual baby products conference, which I have attended for the past several years. Since the conference was held in New York City in 2016, I paid the travel expenses for my parents and in-laws for a luxurious vacation at the same time. If I had been travelling alone, my expenses would have only been \$3,000.
  - \$12,500 – New video equipment, purchased to improve film quality and make editing easier. I also purchased a video camera in 2015 for \$3,500. Per the Canada Revenue Agency website, these are Class 8 assets.
  - \$28,500 – Payment to a video editor, who I hired in April 2016. This has improved the quality of my videos, which I believe has contributed to the higher number of subscribers. I plan to continue using the video editor in the future.
  - \$10,000 – Payment for a part-time assistant to help with filing and other administrative duties.
  - \$6,000 – Home office expenses, including allocation of mortgage interest and utilities for the home office portion.
  - \$8,000 – Motor vehicle expenses for my personal car, on which I had my channel's logo painted. The painting cost \$1,000 and the remainder is for lease costs, gas, and other maintenance expenses. All of my videos are recorded at my home, but since I'm always promoting my videos, I consider this an advertising cost.

### **APPENDIX III VIEWING WEBSITE INDUSTRY INFORMATION**

The average viewing website video earns \$0.007 per view in advertising income.

- Valuations of viewing channels are typically performed in one of two ways:
  - EBITDA multiple – 5x earnings before interest, taxes, depreciation and amortization
  - Value per subscriber – \$4 per subscriber
  
- A general manager for a viewing channel can typically earn approximately \$75,000 a year. The general manager is responsible for managing the filming and editing, responding to subscriber comments, and researching potential content for new videos.



**MARKING GUIDE 3-2**  
**ROXANNE KALPERT (KALPERT)**  
**ASSESSMENT OPPORTUNITIES**

Memo

To: Roxanne Kalpert  
 From: CPA  
 Subject: Analysis of the issues we discussed at our meeting

**Assessment Opportunity #1 (Depth and Breadth Opportunity)**

The candidate calculates the profit for the printed book and e-book options.

*The candidate demonstrates competence in Management Accounting.*

**CPA Map Competencies:**

*3.4.1 Evaluates sources and drivers of revenue growth (Core – Level B)*

*3.5.1 Performs sensitivity analysis (Core – Level A)*

A calculation of the dollar profit for the printed book and e-book options is as follows:

	<b>Printed Book</b>	<b>E-book at 40%</b>	<b>E-book at 30%</b>	<b>Note</b>
Revenue	\$ 1,000,000	\$ 400,000	\$ 450,000	1
Expenses - variable				
Book seller	500,000	–	–	2
Publisher	280,000	220,000	247,500	3
Printer - variable	80,000	–	–	4
Licensing fee	–	40,000	60,000	5
Expenses - fixed				
Distributor	12,000	–	–	6
Printer - fixed	3,000	–	–	6
Programmer	–	20,000	20,000	6
Profit	<u>\$ 125,000</u>	<u>\$ 120,000</u>	<u>\$ 122,500</u>	

**Notes:**

1. Printed book:  $40,000 \text{ books} \times \$25 \text{ per book} = \$1,000,000$   
E-book at 40%:  $40,000 \text{ books} \times \$10 \text{ per book} = \$400,000$   
E-book at 30%:  $60,000 \text{ books} \times \$7.50 \text{ per book} = \$450,000$   
(Note:  $\$25 \text{ per book} \times 40\% = \$10 \text{ per book}$ ;  $\$25 \text{ per book} \times 30\% = \$7.50 \text{ per book}$ )
2. Printed book:  $40,000 \text{ books} \times \$25 \text{ per book} \times 50\% = \$500,000$   
E-book: N/A
3. Printed book:  $40,000 \text{ books} \times \$7 \text{ per book} = \$280,000$   
E-book at 40%:  $40,000 \text{ books} \times \$10 \text{ per book} \times 55\% = \$220,000$   
E-book at 30%:  $60,000 \text{ books} \times \$7.50 \text{ per book} \times 55\% = \$247,500$
4. Printed book:  $40,000 \text{ books} \times \$2 \text{ per book} = \$80,000$   
E-book: N/A
5. Printed book: N/A  
E-book at 40%:  $40,000 \text{ books} \times \$1 \text{ per book} = \$40,000$   
E-book at 30%:  $60,000 \text{ books} \times \$1 \text{ per book} = \$60,000$
6. As provided

If 40,000 copies are sold, the printed book option would provide a profit of \$125,000, while the e-book option would provide a profit of \$120,000, if the price is set at the usual 40% of the printed book price. However, if the price of the e-book is set at 30% of the printed book price, assuming the number of books sold estimated by the publisher is accurate, you would earn a profit of \$122,500.

Therefore, you would earn more from the printed book option as compared to both of the e-book options. Although you would sell more books at a lower price on the e-book, it would not translate into a significant increase in profit when compared to the e-book at the higher price.

**Other Considerations**

The calculations above are based on the estimated number of books that can be sold at a given price. The actual number of books sold could be much higher or lower. This is especially true with the e-book pricing. If you end up selling more or less than the number of books the publisher estimated, it will make a difference in your profit.

In addition, actual costs may differ from estimates, which may also affect net profits earned. However, this is not likely to be an issue, since the most significant costs, in both options, are based on a percentage of the retail price.

For this Assessment Opportunity #1, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts a reasonable calculation of profit for the options presented.

**Competent** – The candidate performs a thorough calculation of profit for the options presented.

**Competent with distinction** – The candidate performs a thorough calculation of profit for the options presented. The candidate provides additional insight for Roxanne.

### Assessment Opportunity #2 (Breadth Opportunity)

The candidate analyzes factors to be considered in the choice between the printed book and e-book options.

*The candidate demonstrates competence in Strategy and Governance.*

### CPA Map Competencies:

2.3.3 Evaluates strategic alternatives (Core – Level B)

### Environmental Considerations

As the publisher mentioned, every printed book sold uses paper and, therefore, trees, but the same does not apply to the e-book option. The e-book is a more environmentally friendly option. The environment is becoming more of a concern for many people, especially those with young children, which is your target reader. If this is an important decision factor for you, then you will want to choose the e-book.

### Market Trend

The publisher mentioned that the e-book format is gaining in popularity, especially with younger readers. Your book is targeting new parents, and since they are typically young, the e-book option might be a better choice.

In order to get the highest sales volume, you need to target the segment of the population that is likely to buy the most books. You should ask the publisher if he has additional information on which segment of the population (young/mid to older parents) is more likely to buy this type of book.

### **Distribution Channels and Publicity**

The publisher seems to be well established and has a distribution channel already in place for the printed book option. This will help with the distribution of the printed book. His fee also includes the organization of book signing sessions in different cities. However, if you chose to do the e-book version, he said that he would also provide publicity for your book on his website.

### **Number of Readers**

Because the printed book can be shared, there is a chance that the 40,000 books sold would reach a lot more than 40,000 readers. Although you are missing out on profit due to more people sharing your book, sharing of the book could result in more sales for future books (if you write a second book). You need to consider if you care about sharing and the impact it could have on book sales. However, if you decide to go with the lower-priced e-book, you would likely reach a higher number of readers, up to 60,000 of them if the publisher's estimate is accurate, which would help reach more potential subscribers to your channel. The e-book at the higher price might not be the best option in this case, since it is the option that would most limit the number of readers reached.

### **Web-Based Business**

Because your business is web-based, your viewers are already using technology and perhaps are more inclined to use an e-reader than the average person.

### **Flexibility**

The e-book seems to offer more flexibility in terms of releasing a second edition of your book and making any future edits. There is flexibility in terms of when the edits could be done, since less work is involved, with the e-book option. There is also flexibility in terms of costs. As pointed out by the publisher, there are higher fixed costs and lower variable costs involved with the e-book than with the printed book. However, with the printed book option, a second edition of your book would mean incurring some of the fixed costs a second time, which does not seem to be the case with the e-book. Since this is your first book and you don't know with certainty how many books you are likely to sell, you may want to ensure flexibility.

### **Conclusion**

There are many pros and cons to each of the printed book and e-book options. You will have to think about which ones are most important to you and weigh them accordingly in your analysis. Given my analysis above, I would recommend going with the e-book option, mainly due to the fact that it provides more flexibility, but also because it will more than likely reach a greater number of readers.

For this Assessment Opportunity #2, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate discusses some of the qualitative factors to be considered in the choice between the printed book and e-book options.

**Competent** – The candidate discusses several of the qualitative factors to be considered in the choice between the printed book and e-book options, and concludes on which one would be the best option.

**Competent with distinction** – The candidate discusses most of the qualitative factors to be considered in the choice between the printed book and e-book options, and concludes on which one would be the best option.

### Assessment Opportunity #3 (Breadth Opportunity)

The candidate evaluates whether the price offered by John for 40% of the viewing channel's profit is fair.

*The candidate demonstrates competence in Finance.*

### CPA Map Competencies:

*5.4.2 Applies appropriate methods to estimate the value of a business (Core – Level B)*

John's offer of \$200,000 for 40% of the viewing channel's profit implies that he believes the value of the channel to be approximately \$500,000 ( $\$200,000 \div 40\%$ ).

In order to determine whether his offer is reasonable, we should value the channel based on the common industry methods.

### Earnings before Income Taxes, Depreciation, and Amortization (EBITDA) Multiple

The first method is an EBITDA multiple. Under this method, EBITDA is calculated and an industry multiple applied (5x in this case). EBITDA should be adjusted for any unusual or one-time items that are not expected to continue in the future, since the investor is paying for ongoing earnings potential. The valuation based on the EBITDA multiple is as follows:

EBITDA valuation		Note
Income	\$ 200,000	1
Expenses		
General manager salary	(75,000)	2
Travel expenses	(3,000)	3
Video equipment	0	4
Video editor	(38,000)	5
Administrative assistant	(10,000)	6
Home office expenses	(6,000)	7
Motor vehicle expenses	(1,000)	8
Ongoing net income	<u>\$ 67,000</u>	
EBITDA multiplier	<u>5</u>	
Valuation	<u><u>\$ 335,000</u></u>	

#### Notes:

1. Income was exceptionally high this year due to a video having gone viral and getting over 10 million views. Because viral videos are not expected to occur again, the income associated with this should be removed and only typical income included (i.e.,  $\$270,000 - (10,000,000 \text{ views} \times \$0.007 / \text{view}) = \$200,000$ ).
2. Roxanne is investing a lot of time in this channel, and if she was not managing it, someone else would have to do it. The value of her time needs to be taken into account. The industry average for a general manager salary is \$75,000; therefore, \$75,000 is a reasonable salary expense for purposes of valuation.
3. Travel expenses were excessive in the current year due to Roxanne taking her parents and in-laws for a luxurious vacation at the same time as the baby products conference. The portion of expenses related to her parents and in-laws is personal and should not be included.
4. Video equipment is capital in nature and depreciated over time. Therefore, it should not be included in EBITDA, since it is included in depreciation.

5. The video editor was hired part-way through the year. Therefore, the salary needs to be extrapolated for the full year he or she will be working in the future (i.e.,  $\$28,500 \div 9 \text{ months} \times 12 \text{ months} = \$38,000$ ).
6. The administrative assistant is a regular business expense and should be included in the valuation.
7. The home office expense is a regular business expense and should be included in the valuation.
8. As discussed further in this memo regarding the tax return, the motor vehicle expenses are not really expenses related to this business. The painting of the automobile could be argued to be an advertising expense and has been included here, but the rest of the costs are considered to be personal and, therefore, excluded from the calculation. Conversely, it could be argued that the painting is a one-time cost that would not recur and, therefore, should be excluded from the calculation.

### Value per Subscriber

Another way the industry values website viewing channels is based on value per subscriber. Based on industry statistics, the value under this method would be as follows:

#### Subscriber valuation

Number of subscribers	90,000
Value per subscriber	\$ <u>4</u>
Subscriber valuation	<u>\$ 360,000</u>

As can be seen from the valuation calculations, both methods yield similar values (\$335,000 versus \$360,000), which would translate into prices of \$134,000 and \$144,000, respectively, for 40% of the channel. Both valuations suggest that the offer of \$200,000 made by John is a very good one, since he is offering a higher price than the valuation amounts.

### Valuation Premium

There is likely a reason that John is willing to pay more for a portion of the channel's profits. It may be that John anticipates that you will obtain additional subscribers or profit, perhaps as a result of your viral video or your upcoming book, and thus is willing to pay a premium for this potential. He may also be willing to pay a premium because he sees synergy with his existing product lines and sees the channel as a good way to promote his existing line of business. He may also want access to the subscriber information, which he may use for other marketing purposes.

For this Assessment Opportunity #3, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts a reasonable calculation of the channel valuation.

**Competent** – The candidate provides reasonable calculations of the channel valuation and concludes on whether the price John is offering is fair.

**Competent with distinction** – The candidate provides reasonable calculations of the value of the channel and concludes on whether the price John is offering is fair. The candidate provides additional insight into the valuation methods or the fairness of the offer.

#### **Assessment Opportunity #4 (Breadth Opportunity)**

The candidate discusses the opportunities presented, considering how they fit with Roxanne's values and goals.

*The candidate demonstrates competence in Strategy and Governance.*

#### **CPA Map Competencies:**

*2.2.1 Assesses whether management decisions align with the entity's mission, vision, and values (Core – Level B)*

*2.3.2 Evaluates the entity's internal and external environment and its impact on strategy development (Core – Level B)*

You have had several opportunities come up recently and have asked me to discuss other factors I think you should consider in making your decisions about going forward with both the book and the investment from John. In addition to analyzing the profits of the different options, it is important to also consider the qualitative aspects of your decisions. The main driver for your business (and what has made it successful to date) is the fact that you like interacting with other parents and you feel that your work contributes to making their lives easier. It is important that the decisions you make regarding your upcoming opportunities reflect these values.



## Book Publishing

There are several additional factors, other than the profit motive, that you should consider in deciding whether to pursue the book publishing.

### Pros/Benefits:

- You have mentioned that publishing a book has always been a dream of yours. Therefore, pursuing this opportunity would provide personal fulfillment.
- The projected profit from your book is between \$120,000 and \$125,000. This would be a significant new source of income for you, which would help you diversify your business and make you less dependent on only one income stream.
- The book is likely a complementary good. By introducing a book, you would likely get more subscribers to your channel, and getting your name out there is a goal of yours. Pursuing the book would likely grow your business overall.

### Cons/Risks:

- Your main goal for the business is to help new parents. While your book could give new parents a distraction from their current situation (comedy), it may not help them with the day-to-day decisions they need to make.
- You only have so much time. If you focus on writing the book, which obviously takes time, you may be diverted from your channel, which could affect the quality of the video and online content and, therefore, have an impact on the website advertising income.
- Assuming you follow up with a second book, there is no guarantee that the publisher will buy it, so this might be a one-time source of income.

## Website Viewing Channel Investment

You have received a very good offer for a portion of your channel's profits. The offer is for 40% of the profits, which is significant. It is important that your business partner shares similar values to yours regarding how to run the business.

You mentioned that you and John disagree on baby product recalls, since he believes parents are mainly at fault for misusing the products. It appears that you disagree completely with this belief. This is a very big, overarching value that can affect how the business is operated.

You should seriously consider whether this is someone you want to go into business with. At a minimum, to protect the decisions you want to make in the future, you should consider putting an agreement in place to document the fact that you will continue to make all the major decisions related to the business. It could protect you against some of the following possibilities and considerations:

1. Will John force you to advertise or subtly endorse his own products through your channel?

2. Will you lose any subscribers if they see an association with a product made by a company that John owns? The channel subscribers want impartial opinions, so how will this affect their perspective?
3. Will you lose your say and control of commenting and representing the products?
4. Will you be obligated to continue to manage the channel, or will you be able to pass the work to a general manager?

You have also mentioned that John has many years of business experience. Since you do not have a business background, you may find that you cannot challenge him when he makes suggestions for the business. While this is not a reason to avoid doing business with John, you may want to ensure you have access to trusted advisors who can help you evaluate suggestions made by John, especially given your differing values. On the other hand, this could be helpful to you, since John might be able to provide you with some business advice, given your lack of business background.

You also need to consider whether this is the business you want to pursue in the long run when your kids grow up, or whether it is simply a good match because of your current stage in life. You might also want to consider whether it would be better to sell a bigger portion of your business, or all of it, and be less involved. However, you will want to ensure you consider the loss of control you might encounter in your business with John being involved.

Lastly, you need to think of the reasons why you are considering selling part of your channel. Since you do not seem to be in need of cash, there is no imminent reason for you to accept having John taking part in your business.

### **Incorporation**

You may want to consider incorporating, given that your business will likely continue to grow with your upcoming book. There are different pros and cons of incorporation. If you are planning to accept the investment offer from John, you may want to incorporate the channel separately from your book sale, to mitigate your risk. I can offer assistance in this area if you wish to discuss further.

For this Assessment Opportunity #4, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts to discuss how the opportunities fit with Roxanne’s values and goals.

**Competent** – The candidate discusses how the opportunities fit with Roxanne’s values and goals.

**Competent with distinction** – The candidate thoroughly discusses how both of the opportunities fit with Roxanne’s values and goals.

#### **Assessment Opportunity #5 (Breadth Opportunity)**

The candidate explains the objectives of the Canada Revenue Agency audit and provides examples of procedures that will likely be performed by the Canada Revenue Agency for the 2015 tax year.

*The candidate demonstrates competence in Audit and Assurance.*

#### **CPA Map Competencies:**

*4.3.5 Assesses the risks of the project, or, for audit engagements, assesses the risks of material misstatement at the financial statement level and at the assertion level for classes of transactions, account balances, and disclosures (Core – Level B)*

*4.3.6 Develops appropriate procedures based on the identified risk of material misstatement (Core – Level B)*

The Canada Revenue Agency will be auditing your 2015 business income and expenses. This is common practice, and you should not be nervous. Their main goal will be to ensure your taxes payable for the year were complete and that you did not underpay. Therefore, they will be concerned about a potential understatement of revenue and/or overstatement of expenses, and the validity of expenses. The following is a list of procedures they may perform:

<b>Item</b>	<b>Procedures</b>
Website/viewing channel income	<ul style="list-style-type: none"> <li>• Review your bank statements for the year and look at the payments from your channel advertisers into your bank account to determine whether total income is accurate and complete.</li> <li>• Look at the videos on your channel for number of views during the year, and perform substantive/analytical procedures to estimate how much income you should have earned during the year.</li> </ul>
Travel expenses	<ul style="list-style-type: none"> <li>• Obtain documentation regarding the baby products conference to ensure travel was for the conference.</li> <li>• Obtain a listing of expenses, select a sample, and vouch to supporting documentation, such as invoices, receipts, etc., to ensure they occurred.</li> <li>• Review a sample of invoices and receipts and ensure that if there are meals and entertainment, they are deducted at the amount allowed (for tax purposes).</li> </ul>
Video camera (and other potential capital assets) expenses	<ul style="list-style-type: none"> <li>• Obtain the receipt for any capital item purchased, review the nature of the item, and ensure it is correctly classified in the appropriate CCA class. Vouch amounts from the receipt to the CCA schedule to ensure accuracy of the cost.</li> </ul>
Administrative assistant	<ul style="list-style-type: none"> <li>• Vouch a sample of payments to supporting documentation, such as invoices from the administrative assistant or timesheets of the administrative assistant, to ensure accuracy and existence of the amounts paid.</li> <li>• Contact the administrative assistant to confirm amounts earned from Roxanne during the year, to ensure accuracy and existence of amounts paid.</li> </ul>
Home office expenses	<ul style="list-style-type: none"> <li>• Select a sample of expenses (utilities, mortgage interest/rent, etc.) and vouch to supporting documentation such as invoice, bank statement, etc., to ensure accuracy and occurrence.</li> <li>• Review the percentage allocated to the home office and review the floor plan to assess the reasonableness of the percentage provided (e.g., based on square footage, etc.).</li> </ul>

For this Assessment Opportunity #5, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate explains what the Canada Revenue Agency is concerned with or provides some examples of procedures that may be performed.

**Competent** – The candidate explains what the Canada Revenue Agency is concerned with and provides some examples of procedures that may be performed.

**Competent with distinction** – The candidate explains what the Canada Revenue Agency is concerned with and provides several examples of procedures that may be performed.

#### **Assessment Opportunity #6 (Breadth Opportunity)**

The candidate calculates the estimated federal taxes payable for the 2016 tax year.

*The candidate demonstrates competence in Taxation.*

#### **CPA Map Competencies:**

*6.2.2 Determines income taxes payable for an individual in routine transactions (Core – Level B)*

Your estimated 2016 taxes payable amount is calculated as follows:

Taxes payable			
Income	\$	270,000	As provided
Expenses			
Travel expenses		(3,000)	Note 1
Video equipment - CCA		(1,250)	Note 2
Video camera - CCA		(630)	Note 3
Video editor		(28,500)	As provided
Administrative assistant		(10,000)	As provided
Home office expenses		(6,000)	As provided
Advertising expense		(1,000)	Note 4
Business income		<u>219,620</u>	
Deduction for CPP contributions on self-employment earnings		(2,544)	Note 5
Taxable income	\$	<u>217,076</u>	
Federal taxes - taxable income is over \$200,000:			
Base amount	\$	46,317	Per reference schedule
Tax on excess (33%)		5,635	Note 6
Total federal tax	\$	<u>51,952</u>	A
Tax credits:			
Basic personal amount	\$	11,474	Per reference schedule
Spouse amount		0	Note 7
CPP contributions on self-employment		2,544	Note 5
Total tax credits		<u>14,018</u>	
At 15%		2,103	B
Total taxes payable	\$	<u><u>49,849</u></u>	A-B

**Notes:**

1. Only the business portion (\$3,000) is deductible; the remaining \$50,000 is a personal expense.
2. Class 8 assets are depreciated at 20% per year. Following the half-year rule:  
 $\$12,500 \times 0.5 \times 20\% = \$1,250$

3. Class 8 assets are depreciated at 20% per year. This is the second year of use for the video camera; in 2015, the depreciation would have been \$350 (i.e.,  $\$3,500 \times 0.5 \times 20\%$ ). In 2016:  $(\$3,500 - \$350) \times 20\% = \$630$
4. The \$1,000 for painting the car with the company logo is arguably deductible as an advertising expense, since there appears to be no other reason for this cost other than promoting the channel from which Roxanne earns her income. The remainder of the costs are considered personal costs because Roxanne is not driving the motor vehicle for business use at all (since she works from home).
5. Roxanne must pay both the employer and the employee portions of the CPP contributions, which is a maximum of \$5,089 for 2016. The employer portion of \$2,544 is deductible from Roxanne's income, and the employee portion of \$2,544 is eligible for a non-refundable tax credit.
6. Tax on excess is equal to the amount over \$200,000 at 33%:  
 $(\$217,076 - \$200,000) \times 33\% = \$5,635$
7. Assuming Roxanne's husband makes more than the basic personal amount, she is not eligible for the spousal amount.

For this Assessment Opportunity #6, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts a reasonable calculation of taxable income.

**Competent** – The candidate provides a reasonable calculation of taxes payable.

**Competent with distinction** – The candidate provides a reasonable calculation of taxes payable and provides additional insight for Roxanne.

**Assessment Opportunity #7 (Breadth Opportunity)**

The candidate discusses the factors that affect residency status and how the income earned in the U.S. is taxed in Canada.

*The candidate demonstrates competence in Taxation.*

**CPA Map Competencies:**

6.2.1 Assesses general tax issues for an individual (Core – Level B)

6.2.6 Analyzes tax consequences for non-residents (Core – Level C)

**Residency Status and Tax Implications**

A taxpayer's obligations to Canada are based on residency status. Residents of Canada are taxed on all of their worldwide income. Conversely, non-residents of Canada are taxed only on the income tied to Canadian sources. Since your husband will have an employment contract in the United States, he will have sources of income that are not tied to Canada, and, therefore, that income will be treated differently, depending on whether he is considered a resident or non-resident of Canada. If he is considered a resident of Canada, that income will be taxed in Canada, but if he is considered a non-resident, that income will not be taxed in Canada.

You may want to consult a U.S. taxation expert to determine his residency status in the United States during his stay there, as well as the U.S. taxation of his employment income.

The U.S. and Canada have a tax treaty that prevents double-taxation. Therefore, regardless of whether he is considered a resident of Canada, the U.S., or both, none of his income will be (effectively) taxed twice. Regardless of the treaty, any foreign taxes paid on income earned outside of Canada will be eligible for a foreign tax credit in Canada.

**Assessing Residency Status**

The important factor in determining residency status is whether a taxpayer has residential ties with Canada. The Canada Revenue Agency considers both significant residential ties (factors that, in and of themselves, make a strong case for residential ties) and secondary residential ties (factors that may contribute to whether residential ties exist).

Significant residential ties to Canada include

- a home in Canada;
- a spouse or common-law partner in Canada; and
- dependants in Canada.



Secondary residential ties that may be relevant include

- personal property in Canada, such as a car or furniture;
- social ties in Canada, such as memberships in Canadian recreational or religious organizations;
- economic ties in Canada, such as Canadian bank accounts or credit cards;
- a Canadian driver's licence;
- a Canadian passport; and
- health insurance with a Canadian province or territory.

Your husband is moving to the United States for only a year, and you are not planning on joining him with the children. Therefore, it is likely that he will be considered a resident of Canada, and be taxed on his worldwide income in Canada. Either way, note that an income tax declaration will have to be filed in the U.S.

For this Assessment Opportunity #7, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate explains the factors that affect residency status or how the income earned in the U.S. is taxed in Canada.

**Competent** – The candidate explains the factors that affect residency status and how the income earned in the U.S. is taxed in Canada.

**Competent with distinction** – The candidate explains the factors that affect residency status and how the income earned in the U.S. is taxed in Canada. The candidate provides additional insight into the residency status factors or the U.S. income tax implications.

**Case #3****(Suggested time: 70 minutes)**

A Toronto-based manufacturer of customized wood windows, World Wide Windows Inc. (W3) caters to the home-renovation market (Appendix I). The company was founded 10 years ago by William, a master craftsman and the sole shareholder. His son Eli and daughter Beth assist with managing W3's operations. General information on W3 is provided in Appendix II and selected financial information is provided in Appendix III.

Due to its reputation for quality workmanship, W3 has grown quickly. Sales have been robust in recent years, and W3 finds itself stretched to meet demand. All divisions are operating at full capacity.

Today is February 3, 2018. You, CPA, an external consultant, were recently hired by William. As W3 continues to grow, William wants a better understanding of the factors that impact W3's profitability, including the company's strengths and weaknesses and the opportunities and threats in its external environment. He wonders which factors are the most important to ensure the long-term success of W3.

Recently, Beth's division has been showing poor performance. William provides you with variance information for both divisions (Appendix IV) and would like you to explain the source of the significant variances, as he is puzzled by how one division can be doing well while the other division is not.

William would also like you to prepare an analysis of whether the current responsibility centre for each division and the transfer pricing policy are appropriate.

In addition, William asks you to assess W3's financial performance using ratio analysis, as he is unsure how W3 is performing financially.

Finally, Beth is considering acquiring new automated installation equipment to improve her division's performance, and William would like to know your thoughts on the proposal (Appendix V), ignoring any tax and financial reporting implications for now.

## APPENDIX I CANADIAN HOME-RENOVATION MARKET

Due to low interest rates, and predictions of continued low rates in the short term, house sales have remained very strong. This, along with the entry of many first-time buyers, has fuelled the home-renovation market. Renovation has become the fastest growing segment of residential investment and is expected to stay robust.

However, competition in the home-renovation market has also increased, as barriers to entry are low. In order to obtain high levels of customer satisfaction, timely delivery and quality workmanship is vital. To be successful, the company must control costs through efficient operations; this is especially important due to the recent increase in the price of wood.

While there are a number of large companies in W3's industry, there are also many small- to medium-sized companies, such as W3. All players in the industry use similar production processes.

Average annual performance measures for W3's industry are as follows:

Current ratio	1.5
Debt-to-equity ratio	0.9
Inventory turnover	17 times
Net profit margin	4%
Return on equity	10%

## APPENDIX II GENERAL INFORMATION ON W3

William is the president of W3, and Eli and Beth both report directly to William.

Eli is in charge of the manufacturing division, which is managed as a cost centre. Manufacturing involves custom cutting various types of wood to precise specifications. It also requires gluing and nailing the wood together in preparation for adding the glass sheeting. The main materials required for the division are wood products, which, because of construction industry demands, have become increasingly difficult to source. Eli was happy that he found another supplier at the beginning of 2017, who offered wood at a significantly cheaper price. The quality of the wood is lower, so there has been more scrappage, but that has been more than offset by the savings from lower prices. The cost of labour for wood-cutting tradespeople has also increased in the past several years due to a labour shortage. In an attempt to cut costs, Eli has recently hired unskilled workers who require more training.

Beth is in charge of the window installation division, which is managed as a profit centre. Her division's tasks involve transporting the finished windows to the worksite and installing them. In 2017, her workers have had more trouble installing the windows, as the frames are cracking during the installation process. As a result, they have had to use more materials, and her workers have often had to work overtime to ensure they can meet the promised installation timelines.

Currently, the manufacturing division transfers all of its windows to the installation division and does not sell any of its products externally. Similarly, the installation division sources windows solely from the manufacturing division. The transfer price is set at the actual cost of the windows manufactured.

W3 had the following ratios in 2016 and 2015:

	<b>2016</b>	<b>2015</b>
Current ratio	4.8	4.8
Debt-to-equity ratio	0.62	0.65
Inventory turnover	21	20
Net profit margin	5%	4%
Return on equity	11%	8%

**APPENDIX III**  
**SELECTED UNAUDITED FINANCIAL INFORMATION FOR W3**

	As at December 31, 2017
Cash	\$ 1,334,911
Accounts receivable	132,000
Inventory (Note 1)	880,000
Equipment, net	3,897,234
Buildings, net	9,823,178
<b>Total assets</b>	<b>\$ 16,067,323</b>
Accounts payable	\$ 121,000
Line of credit (Note 2)	330,000
Long-term debt (Note 2)	6,050,000
Shareholder's equity (Note 3)	9,566,323
<b>Total liabilities and shareholder's equity</b>	<b>\$ 16,067,323</b>
	For the year ended December 31, 2017
Revenues	\$ 22,000,000
Cost of goods sold (Note 4)	16,500,000
Other expenses	4,279,045
<b>Net income</b>	<b>\$ 1,220,955</b>

**Notes:**

1. Beginning inventory for 2017 was \$704,000.
2. Any additional debt to be obtained by W3 must be approved by the bank.
3. Beginning shareholder's equity for 2017 was \$8,345,368.
4. Because windows are not manufactured until an order is received, sales in units equals production in units.

**APPENDIX IV**  
**2017 COST VARIANCE INFORMATION**

W3 uses standard costing. The following is the 2017 cost variance between standard and actual amounts for each division:

	<b>Manufacturing (\$)</b> <b>Favourable/</b> <b>(Unfavourable)</b>	<b>Installation (\$)</b> <b>Favourable/</b> <b>(Unfavourable)</b>
Direct materials price variance	268,800	90,816
Direct materials efficiency variance	(179,200)	(120,064)
Direct labour rate variance	627,648	(105,141)
Direct labour efficiency variance	(624,732)	(50,877)
Variable indirect cost variance	(501)	(1,463)
Fixed indirect cost variance	(1,199)	1,443
<b>Total division cost variance</b>	<b>90,816</b>	<b>(185,286)</b>

## **APPENDIX V NEW EQUIPMENT ACQUISITION**

Specialized equipment is used to remove old windows and install new ones.

The new equipment will cost \$1.5 million if purchased. It is expected to last 12 years, with a salvage value of \$60,000 at that time. Beth estimates the annual incremental net cash inflows from using the new equipment will be approximately \$265,000 before taxes. W3's weighted average cost of capital is 12%.

The vendor for the new equipment provided three options. W3 can a) purchase the equipment outright; b) finance the purchase cost with the vendor over 12 years, which would result in an annual payment of \$150,000; or c) lease the equipment for an annual rent of \$250,000. The lease would be for one year, with an option to renew, with the same terms, for additional one-year periods. The lease option provides for maintenance and repairs of the equipment at no charge to W3.

**MARKING GUIDE 3-3**  
**WORLD WIDE WINDOWS (W3)**  
**ASSESSMENT OPPORTUNITIES**

Memo

To: William, President of World Wide Windows (W3)  
 From: CPA, External Consultant  
 Re: Issues affecting W3

As per your request, in this memo I have provided analysis on the issues you identified.

**Assessment Opportunity #1 (Breadth Opportunity)**

The candidate provides a SWOT analysis and discusses the factors that are the most important to ensuring the long-term success of W3.

*The candidate is demonstrating competence in Strategy and Governance.*

**CPA Map Competencies:**

*2.3.2 Evaluates the entity's internal and external environment and its impact on strategy development (Core – Level B)*

**SWOT Analysis**

A careful assessment of W3's internal and external environment, including corporate strengths and weaknesses, as well as opportunities and threats (SWOT analysis), is important. With respect to W3's competitive position:

<b>Category</b>	<b>Analysis</b>
Strengths	<ul style="list-style-type: none"> <li>W3 has a reputation for quality workmanship, which is a key success factor in the industry.</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>W3 is a small player in a large market, which may prevent it from capitalizing on manufacturing economies of scale or adopting new technology, such as the new installation equipment.</li> <li>W3 has hired a number of unskilled workers. This could jeopardize W3's reputation for quality and have a significant impact on future business in this highly competitive market.</li> <li>The company has been growing rapidly and is stretched, which may affect the quality of the products and services provided.</li> </ul>



Category	Analysis
Opportunities	<ul style="list-style-type: none"> <li>• The home renovation market is growing rapidly and is expected to stay robust. This means W3 can gain new customers.</li> <li>• Continuing low interest rates will increase housing market activity, again increasing the available market for W3.</li> <li>• There is a possibility of increasing current production capacity, which could reduce costs for W3, especially via technological advances, since W3 is currently exploring purchasing new equipment.</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• There are numerous competitors because of low barriers to entry. This increases the pressure to further reduce costs and means additional companies are sourcing the same supplies, which are already becoming scarcer.</li> <li>• Interest rates could increase, which would reduce the available market for W3 because there may be fewer homes with renovation needs.</li> <li>• The cost of materials (wood) is increasing, which is affecting W3's ability to control costs.</li> <li>• There is a shortage of skilled labour, which is affecting W3's ability to hire people who can provide the same quality of work as in the past. It also increases wage rates, affecting W3's cost.</li> </ul>

### Long-Term Success of W3

The three main key success factors in the industry are timely delivery, quality workmanship, and cost control. These key success factors are typically hard to achieve simultaneously, since it is difficult to provide quality products in a timely manner while also at the lowest cost. W3 has been successful and has built a strong reputation based on quality. In contrast, given the increase in costs for both materials and labour, cost control is becoming more difficult. However, it is likely that all competitors are facing the same pressures. Therefore, while W3 should establish standards for production costs relating to materials and labour and carefully monitor them, it is more important to focus on the other key success factors (i.e., timely delivery and quality workmanship), especially given that this is what W3 is known for. It is something that can differentiate W3 from its competitors and is already one of its strengths. The company should ensure it does not jeopardize its reputation by attempting to cut costs too much.

For this Assessment Opportunity #1, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts a SWOT analysis for W3 and identifies the factors that are the most important to ensuring its long-term success.

**Competent** – The candidate performs a reasonable SWOT analysis for W3 and discusses the factors that are the most important to ensuring its long-term success.

**Competent with distinction** – The candidate performs a reasonable SWOT analysis for W3 and discusses the factors that are the most important to ensuring its long-term success. The candidate also provides additional insight.

### Assessment Opportunity #2 (Depth and Breadth Opportunity)

The candidate analyzes the variances in both Eli's and Beth's divisions.

*The candidate is demonstrating competence in Management Accounting.*

### CPA Map Competencies:

*3.2.3 Computes, analyzes, or assesses the implications of variances (Core – Level A)*

### Manufacturing Division

On the surface, the manufacturing division appears to be performing well, since the total cost variance for this division is positive. This is primarily due to the direct materials. For direct materials, there is a positive price variance but a negative efficiency variance. This is consistent with the decision Eli made early in 2017 to purchase a lower quality wood for the windows (thus creating a favourable price variance) but having more scrappage as a result (resulting in an unfavourable efficiency variance). The two variances combined show that, overall, purchasing from a lower quality supplier has had a positive impact on cost by approximately \$90,000 ( $\$268,800 - \$179,200 = \$89,600$ ).

Eli also appears to have managed the challenging labour market well. His division shows a positive direct labour rate variance but a negative direct labour efficiency variance. This is consistent with his decision to hire unskilled workers with a lower rate per hour (thus showing a favourable rate variance), but it is taking extra time to train them (resulting in an unfavourable efficiency variance). The impact of this decision on overall cost is much less, however, because the overall direct labour cost variance is only approximately \$3,000 ( $\$627,648 - \$624,732 = \$2,916$ ).

### **Installation Division**

The installation division appears to be struggling. However, there are specific reasons why the division's performance is poor. Although Beth obtains a positive direct materials price variance since the transfer price from manufacturing is based on actual cost, her direct materials efficiency variance more than offsets the price variance, causing an overall unfavourable direct materials variance of approximately \$29,000 ( $\$90,816 - \$120,064 = \$(29,248)$ ). This appears to be because the lower quality wood used by the manufacturing division is causing problems when the windows are installed, and, as a result, significantly more materials need to be used. In addition, since workers need to spend more time installing the windows, both the direct labour rate and the efficiency variances are increased (due to increased hourly rates when workers are working overtime and the increased number of hours worked in general), causing an overall unfavourable direct labour variance of approximately \$156,000 ( $\$105,141 + \$50,877 = \$156,018$ ).

### **Overall**

Based on the above, it appears that the decision made by the manufacturing division to buy cheaper wood is the cause of the poor performance in the installation division. While Eli is trying to manage the increase in costs facing W3, he may have inadvertently made decisions that are affecting Beth's performance and are inconsistent with W3's strengths. Because of the use of lower quality wood, Beth's costs have increased significantly, which has a negative impact on W3. In addition, the poorer quality wood will likely result in additional breakage subsequent to installation, which may result in customers not being satisfied and affecting W3's reputation.

In addition, Eli has hired unskilled workers. Although there is no significant financial impact (because the direct labour rate and efficiency variances offset each other), it is possible that using less skilled workers will also result in windows of lesser quality, and likely already has. Again, this may affect W3's reputation and, ultimately, its financial success. Since there is no significant financial difference in using skilled versus unskilled workers, Eli should be asked to switch back to skilled workers, which will improve the quality of the product offered.

For this Assessment Opportunity #2, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts to analyze the variances provided.

**Competent** – The candidate analyzes the variances provided and concludes that the poor performance in the installation division is due to decisions made in the manufacturing division.

**Competent with distinction** – The candidate analyzes the variances provided and concludes that the poor performance in the installation division is due to decisions made in the manufacturing division. The candidate also provides additional insight.

### Assessment Opportunity #3 (Depth and Breadth Opportunity)

The candidate discusses the current responsibility centre structure and the transfer pricing policy.

*The candidate is demonstrating competence in Management Accounting.*

### CPA Map Competencies:

#### 3.6.2 Evaluates performance of responsibility centres (Core – Level B)

### Responsibility Centres

There are essentially four types of responsibility centres used by most companies to evaluate performance. These are:

1. **Cost centres:** Responsibility centre managers are evaluated based on how well they control their costs.
2. **Revenue centres:** Responsibility centre managers are evaluated based on how well they manage their sales revenues.
3. **Profit centres:** Responsibility centre managers are evaluated based on how well they manage their revenues and expenses, leading to profitable operations.
4. **Investment centres:** Responsibility centre managers are evaluated based on how well they manage their return on invested capital.

There are two important considerations when selecting an appropriate responsibility accounting structure for management purposes:

1. **Controllability:** Does the manager have control over those items for which they are being evaluated?
2. **Goal congruency:** Will the decisions that the manager makes be in the best interest of the company as a whole?

In the case of W3, the manufacturing division has control over production costs. The installation division has control over divisional profits because it both incurs costs (materials and labour for the window installation) and earns revenues from sales of the fully installed windows. Therefore, for the most part, the managers have control over the items on which they are being evaluated. However, as noted, Beth does not have control over the quality of the windows that she purchases, which is causing issues for her division. It also appears that the installation division may have some control over investment decisions since Beth is suggesting the purchase of new equipment, although control may only be over the purchase of equipment and not over other investment decisions.

In addition, there may be some goal incongruence in the manufacturing division, where Eli has made some decisions that are appropriate for his division but not necessarily in the best interest of the company as a whole.

### **Transfer Pricing**

W3 is using actual costs to make the transfer between the manufacturing and installation divisions. By using actual costs as the basis for the transfer price, the installation division is being held accountable for any inefficient operations of the manufacturing division. This could adversely affect the operating results of the installation division, which is being evaluated as a profit centre. Transfer prices should instead be based on standard costs. In the case of W3, the manufacturing division is operating at capacity, and, therefore, full costing should be used to set the transfer price. This includes both variable and fixed costs.

We note, however, that the current business environment is highly competitive, with numerous home renovation companies, including custom window manufacturers and installers, operating in the greater Toronto area. For this reason, another option is to allow the manufacturing division to sell its products to other businesses (such as retailers or construction companies) in addition to transferring its production to the installation division. The installation division should also be allowed to purchase its windows from external suppliers if more competitive pricing is offered; however, W3 will have to ensure the quality of the windows, which could be more difficult to control when purchasing externally. If this policy is implemented, both outside sales and internal transfers should be made at the market price. There may be some risk that the demand from the installation division may not be fulfilled; if this option is pursued, controls should be put in place to ensure that the installation division's demand can be fully met.

**Recommendation**

Overall, I recommend that the manufacturing division continue to be managed as a cost centre, with the installation division being managed as a profit centre (or potentially as an investment centre if many significant investment decisions are made by the installation division). This will ensure that the managers are accountable for any decisions they have control over. If this setup is used, the transfer price should be set to standard price, to ensure cost inefficiencies from the manufacturing division are not borne by the installation division. W3 should also implement a charge-back policy so that Beth is able to charge Eli for any inefficiencies in her division resulting from the poor quality of the windows provided.

Alternatively, both the manufacturing and installation divisions could be managed as profit centres. In this case, both divisions should be allowed to buy and sell windows to outside parties, and the transfer price should be set at the market price (alternatively, the transfer price could be negotiated between the two divisions so that profits can be shared). When the manufacturing division is operating at full capacity, using market pricing for internal transfers encourages goal congruency. This occurs because both corporate and divisional profit incentives are aligned through the opportunity cost associated with making outside sales and purchases. The manufacturing division can maximize its performance by selling at market, and the installation division can do the same by buying windows at the market price. This ensures efficient operations and decisions that will benefit the company as a whole. However, this is a significant change in the current operations of W3 and isn't necessarily consistent with W3's key success factor of having quality products; thus, it is likely not the best option currently for W3.

Finally, W3 may want to consider whether separate divisions are necessary; the company may be better managed as a whole. This would eliminate some of the inefficiencies caused by managing the divisions separately, such as the need to set transfer pricing. Eli's and Beth's decisions may better align with the company's key success factors if they are not evaluated separately.

For this Assessment Opportunity #3, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate discusses the appropriateness of the current responsibility centres or transfer pricing policy used by W3.

**Competent** – The candidate discusses the appropriateness of the current responsibility centres and transfer pricing policy used by W3.

**Competent with distinction** – The candidate discusses the appropriateness of the current responsibility centres and transfer pricing policy used by W3. The candidate makes a clear recommendation.

#### Assessment Opportunity #4 (Depth and Breadth Opportunity)

The candidate performs a ratio analysis and comments on W3's financial performance.

*The candidate is demonstrating competence in Financial Reporting.*

#### CPA Map Competencies:

1.4.4 Interprets financial reporting results for stakeholders (external or internal) (Core – Level A)

A summary of W3's key financial ratios are as follows:

Ratio Type	Key Ratios	2017	2016	2015	Industry
Liquidity	Current ratio = $(\text{Cash} + \text{AR} + \text{Inventory}) \div (\text{Accounts payable} + \text{Line of credit})$	5.2	4.8	4.8	1.5
Solvency	Debt-to-equity ratio = $\text{Total liabilities} \div \text{Shareholders' equity}$	0.68	0.62	0.65	0.9
Activity	Inventory turnover = $\text{Cost of sales} \div ((\text{Beginning inventory} + \text{Ending inventory}) \div 2)$	21	21	20	17

Ratio Type	Key Ratios	2017	2016	2015	Industry
Profitability	Net profit margin % = Net income ÷ Revenue	6%	5%	4%	4%
Profitability	ROE = Net income ÷ ((Beginning shareholders' equity + Ending shareholders' equity) ÷ 2)	14%	11%	8%	10%

### Liquidity – Current Ratio

A review of the current and prior-year financial statements indicates that W3 has good liquidity (i.e., the ability to pay off short-term obligations as they become due), since the current ratios have remained above the rule-of-thumb threshold of 1.0. In addition, the ratio is significantly higher than the industry average. This means that the company can readily pay its current debts with current assets, which will be viewed positively by both suppliers and lenders. However, the fact that it is significantly higher than the industry average may indicate an opportunity for W3 to invest or convert some of its short-term assets into longer term investments that may provide a better return, since it does not appear that a high current ratio is necessary in the industry.

### Solvency – Debt-to-Equity Ratio

W3's debt-to-equity ratio has been going slightly up and down over the past three years, but it is consistently below the industry average (which means better-than-average performance in this area). This indicates that W3 has good solvency (i.e., the ability to meet debt and other obligations in the long term). The ratio indicates a good balance between financing from debt and from equity, since there is not a significant amount of debt compared to the company's equity and W3 is slightly less leveraged compared to its peers. Highly leveraged companies perform better during growth but suffer more if they are struggling. Given the dependency of W3 on the external environment and economic factors, having a lower debt-to-equity ratio is positive.

### Activity – Inventory Turnover

The company's inventory turnover shows the number of times W3's inventory is sold and replaced over a year. W3's inventory turnover has been relatively stable over the past three years and is above the industry average, meaning that its raw materials and work-in-progress is being used up more quickly, resulting in a reduced cost related to carrying inventory. In addition, W3's inventory likely comprises mainly raw materials, given that windows are not manufactured until an order is received. Overall, it highlights that W3's production process is likely more efficient than those of its competitors.



### **Profitability – Net Profit Margin**

Net profit margin is one of the key indicators of financial success because it indicates how well a company turns sales into profit. The company has shown healthy operating results, as indicated by its increasing net profit margin percentage, which has also been consistently above industry average. In 2017, the ratio of 6% means that W3 kept \$0.06 for every dollar of sales.

### **Profitability – Return on Equity (ROE)**

Return on equity is another key indicator of financial success, indicating how well a company is able to produce a return on the equity invested in it. At 14%, W3's return on equity is excellent, and it has consistently increased in the past three years. It is also better than the industry average.

### **Overall**

Overall, W3 appears to be in good financial health. It excels against industry averages for all ratios provided. There appears to be an opportunity to increase the leverage of W3 slightly by taking on more debt, as the industry seems to be more leveraged than W3 on average. However, W3 is currently prohibited from taking on additional bank debt without the approval of the bank. Taking on additional debt could likely be negotiated with the bank, given the strength of W3's financial performance.

For this Assessment Opportunity #4, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate attempts a ratio analysis for W3 and comments on its financial performance.

**Competent** – The candidate performs a reasonable ratio analysis for W3 and comments on its financial performance.

**Competent with distinction** – The candidate performs a thorough ratio analysis for W3 and comments on its financial performance.

**Assessment Opportunity #5 (Breadth Opportunity)**

The candidate discusses whether to acquire the new equipment and the financing/leasing options available.

*The candidate is demonstrating competence in Finance.*

**CPA Map Competencies:**

*5.3.1 Develops or evaluates capital budgeting processes and decisions (Core – Level B)*

**Acquisition of New Equipment**

The best way to evaluate the acquisition of the new equipment is by using capital budgeting techniques. A discounted cash flow model can be used to calculate the net present value (NPV). A positive NPV supports purchasing the equipment. The rate used for discounting the cash flows is the company's weighted average cost of capital. Tax effects have been ignored as requested.

With an initial cost of \$1.5 million and anticipated annual incremental net cash inflows of approximately \$265,000, the NPV for this investment is \$156,910, calculated as follows:

Initial investment	\$ (1,500,000)
PV of annual incremental net cash inflows for 12 years at 12%	1,641,509
PV of salvage value at the end of 12 years at 12%	15,401
NPV	\$ 156,910

Since this is a positive value, it means that the investment should be made. However, there are some uncertainties and assumptions underlying this decision that William should consider:

1. It is assumed that the cash flows will be the same every year throughout the life of the investment. More realistically, the cash flows will grow gradually every year as the additional capacity is used to meet increasing demand.
2. It is assumed that existing prices and costs for materials and labour will remain constant and that technology (i.e., production capacity) will remain the same over the forecast period (which is based on the life of the equipment).

While it is difficult to model all of these uncertainties, performing sensitivity analysis for some of the key variables — such as the discount rate and net cash inflows — can assist in determining the base case, best case, and worst case scenarios for the investment.

## Financing

The vendor has provided several options:

- W3 can purchase the equipment outright. Given the purchase price of the equipment (\$1.5 million), W3 likely cannot do this, since it does not have sufficient cash at the end of 2017 (approximately \$1.3 million). Even if the cash balance has increased since year end, W3 would likely not want to spend all of its available cash on the capital investment.
- W3 can finance the purchase cost from the vendor. The \$150,000 annual payment results in an implied interest rate of approximately 3% (NPER = 12, PMT = 150,000, PV = (1,500,000)). This is very attractive, given W3's weighted average cost of capital of 12%. However, this is additional debt for W3, which would require approval from the bank.
- W3 can lease the equipment for an annual rent amount. However, the annual rent amount is very expensive compared to financing it (\$100,000 more for the lease payment). Although the vendor will provide maintenance and repairs at no extra charge, it is unlikely that the service justifies the significant extra cost. There is also likely a premium associated with the option to renew the lease at the same rate terms; however, again, the cost difference is quite significant. On the other hand, leasing the equipment does provide for an opportunity to adopt new technology more frequently, since the lease is for only a one-year term, which provides for more flexibility if W3's needs are not being met with the current option. Leasing also allows for more flexibility should W3 not require the additional capacity in the future.

## Recommendation

Based on the analysis, I recommend that W3 acquire the new equipment. However, the current options presented all have some items that W3 needs to address before they can be pursued. W3 should consider first approaching the bank and asking whether they are willing to provide approval for taking on additional debt, or if they are willing to provide the loan for the equipment (the bank will likely agree, given the positive NPV of the purchase). In addition, W3 should go to the vendor and see if a lower lease payment can be negotiated. Depending on the outcome of these next steps, W3's management can make a decision on the financing options presented at that time.

For this Assessment Opportunity #5, the candidate must be ranked in one of the following five categories:

**Not addressed** – The candidate does not address this assessment opportunity.

**Nominal competence** – The candidate does not meet the standards of reaching competence.

**Reaching competence** – The candidate performs a reasonable calculation of the NPV for the acquisition of the new equipment or discusses the different financing and leasing options available to acquire the equipment.

**Competent** – The candidate performs a reasonable calculation of the NPV for the acquisition of the new equipment and discusses the different financing and leasing options available to acquire the equipment.

**Competent with distinction** – The candidate performs a reasonable calculation of the NPV for the acquisition of the new equipment and discusses the different financing and leasing options available to acquire the equipment. The candidate discusses some of the assumptions used or considers how to address the bank covenant.

**APPENDIX E**

**RESULTS BY ASSESSMENT OPPORTUNITIES FOR DAY 2 AND DAY 3**

**THE LEVEL 2 DEPTH TEST (FR/MA)****FINANCIAL REPORTING:**

Day 2 Common		NA	NC	RC	C	CD	C+CD
AO3	BOT revenue recognition	7%	19%	39%	33%	3%	36%
AO4	Non-monetary transaction	5%	13%	34%	43%	5%	48%
AO5	Impairment	19%	18%	32%	28%	3%	31%
AO6	Lawsuit	3%	5%	30%	50%	12%	62%
Day 3 – Q1 Elder Care							
AO2	Crowdfunding	4%	9%	38%	31%	19%	50%
Day 3 – Q3 W3 windows							
AO4	Ratios	1%	8%	30%	57%	4%	61%

**MANAGEMENT ACCOUNTING:**

Day 2 Common		NA	NC	RC	C	CD	C+CD
AO1	RTO program	4%	10%	10%	58%	18%	76%
AO2	Ole Tower	3%	6%	16%	45%	29%	74%
Day 3 – Q1 Elder Care							
AO1	Cash flow projection	1%	8%	13%	32%	47%	79%
Day 3 – Q2 Roxanne							
AO1	Book format profits	0%	1%	26%	62%	10%	72%
Day 3 – Q3 W3 windows							
AO2	Variance analysis	3%	17%	53%	21%	6%	27%
AO3	Responsibility centres/transfer	7%	23%	42%	25%	4%	29%

**THE LEVEL 3 DEPTH TEST ROLES (DAY 2)**

<b>Audit and Assurance</b>		<b>Papers</b>	<b>NA</b>	<b>NC</b>	<b>RC</b>	<b>C</b>	<b>CD</b>	<b>C+CD</b>
<b>AO8</b>	<b>Independence</b>	5367	3%	18%	42%	36%	1%	<b>37%</b>
<b>AO9</b>	<b>RTO purchase credits</b>	5367	8%	18%	33%	40%	1%	<b>41%</b>
<b>AO10</b>	<b>Risk</b>	5367	0%	9%	22%	59%	10%	<b>69%</b>
<b>AO11</b>	<b>Materiality</b>	5367	0%	5%	15%	71%	9%	<b>80%</b>
<b>AO12</b>	<b>Procedures</b>	5367	1%	15%	24%	50%	10%	<b>60%</b>
<b>AO13</b>	<b>Internal controls</b>	5367	1%	4%	16%	63%	16%	<b>79%</b>
<b>AO14</b>	<b>Reports</b>	5367	2%	15%	33%	44%	6%	<b>50%</b>
<b>AO15</b>	<b>Report procedures</b>	5367	6%	8%	15%	55%	16%	<b>71%</b>

<b>Finance</b>		<b>Papers</b>	<b>NA</b>	<b>NC</b>	<b>RC</b>	<b>C</b>	<b>CD</b>	<b>C+CD</b>
<b>AO8</b>	<b>Town House Project -Quant</b>	409	4%	9%	32%	47%	8%	<b>55%</b>
<b>AO9</b>	<b>Town House Project -Qual</b>	409	6%	11%	35%	47%	1%	<b>48%</b>
<b>AO10</b>	<b>Debt Capacity/Financing options</b>	409	6%	7%	44%	38%	5%	<b>43%</b>
<b>AO11</b>	<b>Tenant ownership financing</b>	409	24%	12%	33%	31%	1%	<b>32%</b>
<b>AO12</b>	<b>Financial position &amp; return</b>	409	5%	9%	34%	51%	1%	<b>52%</b>
<b>AO13</b>	<b>Bates Foundation offer</b>	409	16%	3%	24%	55%	1%	<b>56%</b>
<b>AO14</b>	<b>WACC</b>	409	6%	5%	24%	56%	9%	<b>65%</b>

**THE LEVEL 3 DEPTH TEST ROLES (DAY 2)**

Performance Management		Papers	NA	NC	RC	C	CD	C+CD
AO8	Risk analysis and mitigation	1117	1%	9%	34%	46%	9%	55%
AO9	Outsourcing - quant	1117	2%	14%	35%	44%	4%	48%
AO10	Outsourcing - qual	1117	1%	11%	40%	42%	6%	48%
AO11	Mgt incentive scheme	1117	2%	11%	32%	48%	7%	55%
AO12	Misalignment of activities	1117	11%	9%	28%	30%	23%	53%
AO13	Mission statement	1117	4%	26%	36%	32%	2%	34%
AO14	Reporting system	1117	4%	19%	32%	39%	7%	46%
AO15	Governance issues	1117	1%	12%	35%	48%	4%	52%

Taxation		Papers	NA	NC	RC	C	CD	C+CD
AO8	Gloria's compensation	329	1%	7%	42%	41%	9%	50%
AO9	Bates investment	329	3%	19%	29%	20%	28%	48%
AO10	LCGD planning	329	13%	23%	12%	43%	9%	51%
AO11	Gloria share donation	329	5%	8%	29%	51%	8%	59%
AO12	Stock option plan	329	2%	5%	21%	54%	19%	73%
AO13	Ajax property sale (13(21.1))	329	4%	15%	28%	38%	16%	54%
AO14	Welzer property exchange (barter)	329	7%	14%	27%	48%	3%	51%
AO15	Fish street property transfer	329	2%	6%	31%	40%	20%	60%



**THE LEVEL 4 BREADTH TEST (BY COMPETENCY AREA)**

Financial Reporting		NA	NC	RC	C	CD	RC+C+CD
<b>Day 2 Common</b>							
AO3	BOT revenue recognition	7%	19%	39%	33%	3%	75%
AO4	Non-monetary transaction	5%	13%	34%	43%	5%	82%
AO5	Impairment	19%	18%	32%	28%	3%	63%
AO6	Lawsuit	3%	5%	30%	50%	12%	92%
<b>Day 3 – Q1 Elder Care</b>							
AO2	Crowdfunding	4%	9%	38%	31%	19%	88%
<b>Day 3 – Q3 W3 windows</b>							
AO4	Ratios	1%	8%	30%	57%	4%	91%

Management Accounting		NA	NC	RC	C	CD	RC+C+CD
<b>Day 2 Common</b>							
AO1	RTO program	4%	10%	10%	58%	18%	86%
AO2	Ole Tower	3%	6%	16%	45%	29%	90%
<b>Day 3 – Q1 Elder Care</b>							
AO1	Cash flow projection	1%	8%	13%	32%	47%	92%
<b>Day 3 – Q2 Roxanne</b>							
AO1	Book format profits	0%	1%	26%	62%	10%	98%
<b>Day 3 – Q3 W3 windows</b>							
AO2	Variance analysis	3%	17%	53%	21%	6%	80%
AO3	Responsibility centres/transfer	7%	23%	42%	25%	4%	71%

**THE LEVEL 4 BREADTH TEST (BY COMPETENCY AREA)**

<b>Strategy and Governance</b>		<b>NA</b>	<b>NC</b>	<b>RC</b>	<b>C</b>	<b>CD</b>	<b>RC+C+CD</b>
<b>Day 3 Q1-AO7</b>	<b>Performance measures</b>	7%	17%	30%	29%	17%	<b>76%</b>
<b>Day 3 Q2-AO2</b>	<b>Ebook vs printed</b>	1%	4%	23%	38%	34%	<b>95%</b>
<b>Day 3 Q2-AO4</b>	<b>Values and goals fit</b>	3%	12%	22%	36%	27%	<b>85%</b>
<b>Day 3 Q3-AO1</b>	<b>SWOT</b>	1%	7%	49%	41%	2%	<b>92%</b>

<b>Audit and Assurance</b>		<b>NA</b>	<b>NC</b>	<b>RC</b>	<b>C</b>	<b>CD</b>	<b>RC+C+CD</b>
<b>Day 3 Q1-AO4</b>	<b>Review planning memo</b>	1%	7%	40%	45%	7%	<b>92%</b>
<b>Day 3 Q1-AO5</b>	<b>Procedures</b>	7%	29%	28%	25%	11%	<b>64%</b>
<b>Day 3 Q2-AO5</b>	<b>CRA audit procedures</b>	4%	11%	43%	27%	16%	<b>86%</b>

<b>Finance</b>		<b>NA</b>	<b>NC</b>	<b>RC</b>	<b>C</b>	<b>CD</b>	<b>RC+C+CD</b>
<b>Day 3 Q1-AO3</b>	<b>Clawback</b>	8%	15%	36%	27%	14%	<b>77%</b>
<b>Day 3 Q2-AO3</b>	<b>Business valuation</b>	1%	11%	46%	29%	13%	<b>88%</b>
<b>Day 3 Q3-AO5</b>	<b>Equipment</b>	3%	13%	38%	37%	9%	<b>84%</b>

<b>Taxation</b>		<b>NA</b>	<b>NC</b>	<b>RC</b>	<b>C</b>	<b>CD</b>	<b>RC+C+CD</b>
<b>Day 3 Q1-AO6</b>	<b>Net income for tax purposes</b>	1%	10%	27%	36%	26%	<b>89%</b>
<b>Day 3 Q2-AO6</b>	<b>Tax payable</b>	3%	6%	35%	40%	16%	<b>91%</b>
<b>Day 3 Q2-AO7</b>	<b>Tax residency</b>	3%	9%	26%	52%	11%	<b>89%</b>

**APPENDIX F**

**BOARD OF EXAMINERS' COMMENTS ON DAY 2 AND DAY 3 SIMULATIONS**

**BOARD OF EXAMINERS' COMMENTS ON DAY 2 SIMULATION**

<b>Paper/Simulation:</b>	<b>Day 2 (FRE) – Role Case COMMON REQUIREDs</b>
<b>Estimated time to complete:</b>	300 minutes
<b>Simulation difficulty:</b>	Average
<b>Competency Map coverage:</b>	Common AOs (7 Assessment Opportunities including an Enabling)

**Evaluators' comments by COMMON Assessment Opportunity (AO) for all roles****AO#1 (Rent-to-Own Board Target)**

Candidates were asked to determine whether FRE could meet the board's objective regarding tenant ownership by December 31, 2018, with the current minimum purchase credit requirement of 10% of the purchase price. They were then asked to consider whether the objective would be met if the minimum were reduced to 7.5%. Information on the rent-to-own (RTO) program was presented in Appendix II of the case. To demonstrate competence, candidates were expected to perform a calculation to determine the number of rental units that would accumulate sufficient purchase credits by December 31, 2018, to complete the purchase, at both 10% and 7.5%.

Candidates performed well on this AO. A wide variety of valid approaches to this calculation were available. Most candidates calculated the amount of credits that would be held by each tenant at December 31, 2018, and compared this to the expected minimum purchase credit requirement (by calculating the credits as a percentage of purchase price, by determining the amount of credit required to make the purchase, or by determining the value of the apartment tenants could acquire with those credits). Another common approach was to determine the number of months it would take to accumulate the purchase credit requirement and compare it to the number of months available (in one of many different ways – starting from the beginning of tenancy, for example, or simply looking at the months remaining). The candidates then concluded on whether or not the goal would be met at 10% and at 7.5%.

Strong candidates typically performed the calculation in a more efficient manner than others (e.g., by calculating 7.5% and 10% of the expected price, subtracting \$4,400 of expected accumulated credits, and comparing to the tenants' existing accumulated purchase credits). They also discussed some of the assumptions behind their calculation, such as the variability of the fair value of the properties.

Most weak candidates just calculated the amount of credits that will be earned and left their analysis incomplete, or they performed an analysis that was not logical (e.g., by using a present value calculation, or by comparing credits at August 31, 2017, to credits at December 31, 2018, and concluding that, because the latter was a higher number, all the units would be sold).

**AO#2 (Cost-Volume-Profit Analysis of Ole Tower Project)**

Candidates were asked to calculate what rent amount to charge in order to generate a target monthly cash flow of \$10,000 for the Ole Tower project. Information on the Ole Tower luxury apartment building was presented in Appendix III of the case. To demonstrate competence, candidates were expected to perform a calculation of the amount of rent to charge, considering the significant costs and the \$10,000-per-month expected cash flow.

Candidates performed well on this AO. Most candidates calculated total fixed costs plus expected profit and used this in combination with the variable costs to calculate the required rent to charge. Calculations took a variety of forms, from simply dividing fixed costs by the number of units and adding variable costs, to using algebra for the break-even formula to solve for \$X rent. Most candidates performed a sensitivity analysis by calculating the price to charge at both 15 units and 18 units.

Most strong candidates did this calculation efficiently, by simply dividing total fixed costs plus expected profit by the number of units and adding variable costs. They almost always did a sensitivity analysis, considering at least two expected occupancy rates, and questioned the assumptions involved, such as the additional costs that have not yet been considered (e.g., financing costs).

Most weak candidates attempted a similar calculation, but they left out significant components, such as the mortgage, the variable costs, or the expected profit amount. Many of them calculated the rent to charge based only on an occupancy level of 18 units, which is unrealistic, given the case facts presented.

**AO#3 (Revenue Recognition)**

Candidates were asked to address any accounting issues that they noted specific to the events that occurred in 2017. The Build-Operate-Transfer (BOT) project was presented in detail in Appendix III of the case, and Gloria indicated she was interested in recording some of the revenue in the current year, if possible. To demonstrate competence, candidates were expected to apply the revenue recognition criteria to the building construction portion of the contract and to provide a conclusion on how to recognize revenue for this contract.

Candidates struggled with this AO. Many candidates attempted to analyze the relevant *Handbook* criteria (either general revenue recognition criteria or the criteria related to recognizing revenue on a percentage-of-completion versus completed-contract basis), but their analysis lacked depth and did not fully support the recommendation made. Some candidates concluded that performance or delivery was not met, but then went on to identify that percentage of completion was an option, without linking it back to performance in any way, and recommended recording some or all of the revenue despite performance not being met. Other candidates concluded that percentage of completion was an acceptable method to recognize revenue, but they did not adequately support how performance had been partially achieved or why this method was appropriate. Finally, some candidates recommended that percentage of completion be used, but then provided ways to record the revenue that were inconsistent with their recommendation (e.g., some candidates recognized revenue on a cost-recovery basis despite recommending percentage of completion).

Strong candidates analyzed the relevant revenue recognition criteria, recognizing that performance was partially complete, and then suggested that the percentage-of-completion method would be appropriate to use to measure performance. Many of these candidates provided a calculation of the revenue to be recognized, taking into account the expected profit margin and the fact that FRE has not yet provided the trees and warranty. Some strong candidates also discussed the operating portion of the contract and considered whether revenue could be recognized for that portion.

Many weak candidates jumped to a recommendation on the amount of revenue to be recognized without adequately analyzing the case facts against relevant *Handbook* criteria, thereby providing an unsupported conclusion. Some attempted to analyze only the operations component of the BOT project, usually attempting to discuss it as if it were a government grant rather than revenue.

#### **AO#4 (Non-monetary Transaction)**

Candidates were asked to address any accounting issues that they noted specific to the events that occurred in 2017. Information was provided in Appendix III on a property exchange with Welzer Properties Inc., which was recorded at the cost of the property given up. To demonstrate competence, candidates were expected to apply the *Handbook* criteria for non-monetary transactions to this exchange and to consider which value would be most appropriate to use to record this transaction.

Overall, candidates performed adequately on this AO. Most candidates attempted to analyze the exceptions to recording a non-monetary transaction at fair value, often focusing their discussion on the commercial substance exception using some case facts (usually the difference in revenues or the values of the properties). Candidates concluded either that commercial substance did not exist (and, therefore, that the transaction should take place at carrying amount) or that it did exist (and, therefore, that the transaction should take place at fair value). Many of those who concluded the transaction should take place at fair value recognized the need to determine the more reliable fair value amount (i.e., the independent appraisal versus the property tax valuation).

Strong candidates analyzed all four exceptions to recording the transaction at fair value, supporting their discussion of each criterion using appropriate case facts. Many concluded that none of the exceptions applied and, therefore, fair value should be used to record the transaction. They then went on to specify that the more reliably measured fair value is to be used for measurement, and they concluded on one of the values as being more reliable, supporting their position.

Many weak candidates jumped to a conclusion without considering the exceptions outlined in the *Handbook* and did not consider which of the fair values presented would be the more reliably measurable, despite the many case facts that were presented to trigger a discussion of reliability. Some provided an adequate analysis of the exceptions but then came to a conclusion that was contrary to their analysis (e.g., concluding that the transaction lacked commercial substance but then recommending that the transaction be recorded at fair value).

### **AO#5 (Impairment)**

Candidates were asked to address any accounting issues that they noted specific to the events that occurred in 2017. In Appendix III, they were told that Judy is concerned about how some valuation issues might affect the accounting for certain properties as a result of some information that recently came to light. To demonstrate competence, candidates were expected to identify the potential for impairment of the properties mentioned, integrating the *Handbook* guidance into their analysis, to explain whether any of the information represents an indicator of impairment and, if so, whether the recoverable amount exceeds the carrying value of the asset (and the resulting amount of impairment, if any).

Candidates struggled with this AO. Most candidates identified all three properties and mentioned some case facts that might have indicated impairment (e.g., a recent property tax assessment and external appraisal, the increase in crime rates, and the crack found in one of the rental buildings). However, their discussions only sometimes linked the case facts to the *Handbook* guidance (i.e., what would be valid indicators of impairment and what would be the process to determine recoverable amount and any subsequent write-down). Of the candidates who recognized that indicators of impairment existed, most then stated that more information was required, without identifying that they were provided with case facts that could be used to discuss whether recoverable amount would be affected. Many also did not seem to realize that fair value information was provided and could be used to discuss the issue.

Strong candidates identified the various steps from the *Handbook* that would apply to determine impairment (i.e., test when there are indicators of impairment, then compare the carrying value to recoverable amount, and finally impair to fair value) and applied them to the case facts. Many provided reasonable discussions of the indicators of impairment and then compared the carrying values to the amounts from the property fair values table found in Appendix I. However, few strong candidates provided much discussion of the recoverable amount, despite the fact that there were case facts that could have been used to estimate whether the recoverable amount would change.

Many weak candidates recognized that the case facts indicated there was potential impairment, but they did not go on to discuss how the amount of impairment would be determined. Those who did often confused the steps required, suggesting that the buildings should be written down to fair value without first considering whether carrying value could be recovered. Some attempted to apply incorrect *Handbook* guidance to the three properties identified. For example, some candidates tried to discuss contingent gains, the revaluation method under IFRS, contingent losses, revenue recognition, whether fixing the crack in the building was a betterment versus a repair, or, more broadly, the nature of the cost method (e.g., what costs should be included as an asset cost). A surprising number of candidates did not address this AO at all, despite the clear request to consider the impact of the information provided on the accounting of the properties.

### **AO#6 (Lawsuit)**

Candidates were asked to address any accounting issues that they noted specific to the events that occurred in 2017. Details of a recent lawsuit were provided to candidates in Appendix III, with the lawyer responsible for handling the case unable to comment on the likely outcome of the lawsuit due to a lack of available information. To demonstrate competence, candidates were expected to use the information provided to analyze the recognition criteria for contingencies, to conclude on whether or not to record a liability, and to identify that disclosure was required.

Candidates performed well on this AO. Most candidates identified the recognition criteria and concluded that the lawyer's inability to provide information meant that either the likelihood or the measurement could not be determined at this stage and that, therefore, no accrual could be made but disclosure was required. Some candidates recognized that more information would be available in two weeks' time, and they discussed the appropriate accounting treatment for the possible outcomes of the future information (e.g., either likelihood or measurement could be confirmed, or likelihood and measurement would continue to be uncertain).

Most strong candidates provided the recognition criteria from the *Handbook*, applied relevant case facts, and concluded that an accrual would not be required. Many recognized the need for disclosure and then went on to explain some of the specifics of what would be required to be included in the disclosure.

Weak candidates concluded that a provision needed to be recorded (despite the clear case facts presented that did not support this conclusion), or they concluded that a provision did not need to be recorded but also concluded that disclosure was not necessary either. Some seemed to be confused by the fact that there was information that would be coming in two weeks' time and simply recommended waiting for the information, without further analyzing the issue.



**AO#7 (Enabling – Conflict of Interest and Ethics)**

Candidates were not explicitly directed to this AO. Information was provided throughout the case that indicated a potential conflict of interest on the part of Andy, FRE's COO. In addition to being responsible for FRE's operations, Andy sits on the board of Halloran Construction Inc., which has been responsible for the construction of several of FRE's buildings, two of which have since developed cracks. As a result of the first crack, FRE ended up selling the building at a significant loss. The second crack developed in a recently constructed building, and Andy directed the VP Acquisitions, Construction & Maintenance not to investigate it. To demonstrate competence, candidates were expected to put together these case facts and explain the potential that Andy may not be acting in the best interests of FRE.

The majority of candidates did not attempt to address this AO. Of those who did address it, strong candidates identified that Andy was in a conflict-of-interest situation, since he sits on the board of Halloran and also functions as COO of FRE. Most identified that Andy's role with Halloran may have influenced some of his decisions, such as his instruction to not investigate the crack in the Atman building and his continued use of Halloran despite repeated problems with the company. Most strong candidates usually went further and recommended some actions to take, such as asking Andy to step down from the board of Halloran.

Weak candidates recognized that there was an issue with Andy's positions, but many did not adequately explain why this would cause a conflict-of-interest situation. Some recognized that the continued use of Halloran was a problem, but they did not understand that Andy's conflict-of-interest situation would have been the cause of the decision to continue to use Halloran.

This AO assessed enabling skills and was considered for the sufficiency score only.

<b>Paper/Simulation:</b>	<b>Day 2 (FRE) – Role Case ASSURANCE</b>
<b>Estimated time to complete:</b>	300 minutes
<b>Simulation difficulty:</b>	Average
<b>Competency Map coverage:</b>	Audit and Assurance role (8 Assessment Opportunities)

### **Evaluators' comments by Assessment Opportunity (AO) for the ASSURANCE ROLE**

#### **AO#8 (Independence)**

Candidates were told by the engagement partner that the additional advisory work related to the rent-to-own (RTO) program and the Ole Tower project could be performed by the firm, but that a memo to the file discussing the relevant independence rules and potential threats to performing the additional work should be drafted. To demonstrate competence on this assessment opportunity, candidates were expected to discuss some of the relevant threats (advocacy, self-interest, and self-review), with relevant case facts applied, and to conclude on whether threats to independence existed. The AO was considered difficult.

This was the Assurance AO that candidates struggled with the most. The majority of candidates attempted to discuss the independence issue but incorrectly applied independence concepts from CAS 200 (i.e., integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour). When candidates did address the relevant concepts, many struggled to explain the ideas in a meaningful manner. Often their conclusions demonstrated a lack of understanding of the concepts. For example, many candidates concluded that there was a self-review threat, despite the fact that it is very unlikely that the audit engagement would be relying on any of the work provided from the advisory engagements. A surprising number of candidates concluded that the advisory work could not be performed, despite the partner's clear statement that the work could indeed be performed by the firm. However, when candidates concluded that threats to independence existed, most of them were able to provide valid safeguards to address these potential threats.

Strong candidates recognized that there were no significant threats to independence (understanding the fact that it is very unlikely that the audit engagement would be relying on any of the work provided from the advisory engagements), supporting their conclusion with a discussion of the relevant concepts and applying them to the specific situation. Some concluded that, although there were no actual threats to independence, there may be some perceived threats to independence, and they recommended appropriate safeguards to mitigate the risks.

Many weak candidates demonstrated a lack of understanding of threats to independence, concluding that significant threats to independence existed. They struggled to explain the various independence concepts correctly, often providing a "laundry list" of threats regardless of whether they applied to the situation (e.g., familiarity threat, intimidation threat). Many of those who were able to identify the relevant threats discussed them in a superficial manner and did not apply the concepts to the situation presented.

**AO#9 (Rent-to-Own Purchase Credits)**

Candidates were asked by Judy to review FRE's accounting treatment of the RTO purchase credits, including any forfeited credits to date, because she is unsure about the current treatment and wants to understand any potential reporting implications. Information on the purchase credits was provided in Appendix II and Appendix V of the case. To demonstrate competence, candidates were expected to apply the *Handbook* criteria related to either a liability or revenue recognition to determine how the credits should be recorded.

Candidates generally struggled with this AO. Many were able to identify the correct *Handbook* section to apply but were not able to adequately apply case facts to their analysis. There was a wide variety of responses for this assessment opportunity. Some candidates focused only on the original purchase credits paid by the tenants, without discussing the forfeited portion, despite a clear request from Judy to analyze the accounting treatment for them. Others discussed the forfeited credits but concluded that no portion should be recognized as revenue, despite the fact that there is no further obligation from FRE once the credits have been forfeited. Some candidates ignored the purchase credits altogether and discussed revenue recognition related to the full rent payment, which added little value. Candidates appeared to struggle more when trying to approach the issue from a revenue recognition perspective; they had a hard time discussing the performance criterion because FRE did not have to do anything additional for revenue to be recognized (the triggering event came from actions by the tenants).

Strong candidates provided reasonable discussions of the purchase credits by applying case facts to the relevant *Handbook* guidance. They tended to discuss the three different scenarios for the purchase credits separately (i.e., when a tenant purchases the unit, when a tenant has had three consecutive months of unpaid rent, and when a tenant moves out of the building). As a result, they demonstrated a strong understanding of how the purchase credits would be treated.

Many weak candidates focused on the accumulated purchase credits and whether they met the definition of a liability, without considering what would happen to the purchase credits in the future. Some candidates focused on the presentation of the liability (e.g., whether the amounts should be classified as short-term versus long-term, or whether the amounts are accounts payable versus deferred revenue). These candidates did not address the most significant accounting issue related to the purchase credits and were unable to demonstrate an adequate understanding of the issue.

**AO#10 (Risk)**

Candidates were asked by the engagement partner to prepare the audit plan for FRE. The partner specified that the audit plan should include an assessment of the overall financial statement risk. To demonstrate competence, candidates were expected to provide a balanced discussion of some of the risk factors that should be taken into account and to conclude on the overall financial statement risk of the audit engagement.

Candidates performed relatively well on this AO. Most were able to provide several risk factors and explain how they had an impact on the financial statement risk, using facts from the case as support. The most commonly addressed risks included the fact that there was a new controller, that there were already accounting errors noted, that there were new users of the financial statements, that Gloria has devoted less time to the business, and that FRE is a private company with only a small return target. Most candidates provided a balanced discussion of the risk factors, identifying both factors that increased and factors that decreased the overall financial statement risk. They were also able to provide a conclusion that was consistent with their analysis.

Strong candidates provided a more complete list of factors and, for each risk factor they identified, explained how it would increase or decrease risk. They also provided a logical conclusion on the overall financial statement risk, taking into account both the increasing and decreasing risk factors in coming to their overall assessment.

Weak candidates generally did not provide a sufficient number of relevant risk factors, or they simply listed risk factors without explaining how they would increase or decrease the overall financial statement risk. Some candidates also provided business risk factors instead of focusing on financial statement risk factors and, therefore, had difficulty providing a useful analysis.

### **AO#11 (Materiality)**

Candidates were asked by the engagement partner to prepare the audit plan for FRE. The partner specified that the audit plan should include a discussion of materiality. In order to demonstrate competence, candidates were expected to calculate the materiality to be used for the audit engagement, in light of the users, and support the basis and percentage chosen with case facts.

Candidates performed well on this AO. Most candidates were able to provide a reasonable discussion of materiality, discussing multiple users of the financial statements and choosing a basis that would address their needs. They were also able to justify the percentage used to calculate materiality and provide a calculation. Most candidates recognized the need to annualize the 11-month period results for the full year, and they adjusted for any accounting errors noted. However, the Board was disappointed by the number of candidates who did not recognize that FRE had a philanthropic mission and, as a result, that a basis other than net income, such as total assets, might be more appropriate for FRE.

Strong candidates provided a more in-depth discussion of the users, identifying several of the relevant users (e.g., Gloria, the board, current lenders, potential lenders, and potential investor). They discussed each user's needs and linked the basis they chose to calculate materiality to those needs. They also used a percentage that was within the acceptable range and justified the choice by linking it to the sensitivity of the users. Many strong candidates recognized the need to adjust for accounting errors and/or the need to annualize their chosen basis. Most also provided a discussion of what performance materiality is and a calculation of it.

Many weak candidates identified the users but did not discuss what their needs would be. Some used an inappropriate basis or percentage, or both, to calculate materiality, and many did not justify the use of either with relevant case facts. Few weak candidates considered the need to adjust for accounting errors or to annualize the chosen basis, and many did not discuss performance materiality.

### **AO#12 (Procedures – Accounting Issues)**

Candidates were asked by the engagement partner to develop audit procedures for the accounting issues they identified. In order to demonstrate competence, candidates were expected to provide a reasonable number of procedures that were specific to the identified accounting issues of FRE.

Candidates performed adequately on this AO. Most candidates attempted to provide several procedures, and they were able to provide a sufficient number of procedures that appropriately addressed the risks related to the specific accounting issues. The most commonly addressed procedures were related to the Build-Operate-Transfer project, the Welzer property exchange, the RTO purchase credits, and the lawsuit from the resident.

Strong candidates were able to provide precise and well-described procedures that were clearly tied to the significant risks identified. Strong candidates also provided more procedures, both for each specific accounting issue and for more of the accounting issues. Many of them provided auditing procedures immediately following each accounting discussion, which was an efficient way to ensure that the procedures provided addressed the most relevant risk areas related to each accounting issue.

Weak candidates provided vague procedures, so that it was difficult to determine what exactly they were proposing to do and what risk they were trying to cover. Weak candidates also tended to provide a list of generic procedures that could have applied to any audit. These procedures did not address the specific accounting issues and, as a result, were of limited value.

### **AO#13 (Internal Controls)**

Candidates were asked by the engagement partner to draft the management letter discussing any control weaknesses identified, along with recommendations to improve them. Information on some of the most significant control weaknesses were provided in Appendix V (Assurance). In order to demonstrate competence, candidates were expected to identify some of the internal control weaknesses, explain the implication of each weakness, and provide a reasonable recommendation to address the problem.

Candidates performed well on this assessment opportunity. The majority of candidates were able to identify some of the control weaknesses, explain their impact, and provide valid recommendations. The most commonly identified issues were the delay in depositing cash received, the lack of reconciliations of rent collected, the lack of backup for vandalism repairs, and the lack of supervision of superintendents. The lack of tracking of forfeited RTO purchase credits was rarely addressed by candidates.

Strong candidates were able to provide good coverage of the issues and appropriately explained the implications of the weaknesses. They also proposed practical recommendations to address the weaknesses identified.

Weak candidates did not adequately explain why an internal control weakness they identified would cause issues for FRE and/or did not provide valid recommendations that would address the weakness. Many weak candidates attempted to discuss several weaknesses within the same discussion, and thus they had a harder time providing clear explanations of the implications of the various weaknesses for FRE. Some recommendations made by weak candidates were also not practical. For example, some candidates recommended that FRE start accepting credit cards. This was not a practical recommendation, given that the case explicitly noted that FRE does not use credit cards because of the fees involved.

#### **AO#14 (Special Reports)**

Candidates were asked by the engagement partner to determine the reporting options available to meet the Declaration requirements related to the Carter Apartment funding agreement. Information on the Declaration required was provided in Appendix V. In order to demonstrate competence, candidates were expected to discuss some valid reporting options and provide a supported conclusion.

Candidates performed adequately on this AO. Most candidates were able to identify at least a couple of valid reporting options and adequately explain what they are. However, candidates struggled to explain how each reporting option could be useful given what the ministries have asked for. Most candidates recognized that the term "declaration" was vague and that clarification with the ministries should be sought before a reporting option could be chosen.

Strong candidates discussed several valid reporting options (e.g., a Section 5815 report, a Section 8600 report, and a Section 9100 report), demonstrating in their discussion that they understood the fundamental differences between the different reports, and explained how each one would be useful to the ministries. Their conclusions were appropriate and well supported.

Weak candidates did not have a good grasp of the reporting options. As a result, they had a hard time explaining the differences between the reports or recommending the one that would be best given the situation. In addition, many simply based their decision on which reporting option to choose based on cost considerations, without recognizing that the least costly reporting option may not meet the needs of the funding ministries. Some weak candidates also recommended reports that would not be appropriate under the circumstances (e.g., a CAS 805 report).

**AO#15 (Procedures – Special Report)**

Candidates were asked by the engagement partner to discuss the procedures that could be carried out in relation to the Declaration and to identify any definitions and other issues that may require clarification from the funding ministries in order to perform the work. Information on the Declaration required was provided in Appendix V (Assurance). In order to demonstrate competence, candidates were expected to provide a reasonable number of procedures and/or clarifications covering several of the conditions presented.

Candidates performed well on this AO. Most candidates attempted to provide several procedures that were relevant to the conditions from the ministries. The most commonly addressed procedures were related to ensuring that the \$200,000 related only to the Carter Apartment construction, that three bids were obtained for budgeted items over \$100,000 and that the lowest bid was chosen, and that the 15% minimum number of apartments to be rented by Status First Nation members was met. A surprising number of candidates did not identify any required clarifications, despite the explicit request from the partner to consider them.

Strong candidates were able to provide precise and well-described procedures that were clearly tied to the conditions required by the ministries. Strong candidates also provided more procedures, and many identified required clarifications, covering all of the conditions presented.

Weak candidates provided procedures that were too vague to determine what exactly they were proposing to do. Weak candidates also addressed fewer of the conditions presented and struggled to provide procedures that addressed the specific risk of the condition.

<b>Paper/Simulation:</b>	<b>Day 2 (FRE) – Role Case FINANCE</b>
<b>Estimated time to complete:</b>	300 minutes
<b>Simulation difficulty:</b>	Average
<b>Competency Map coverage:</b>	Finance role (7 Assessment Opportunities)

### **Evaluators' comments by Assessment Opportunity (AO) for the FINANCE ROLE**

#### **AO#8 (Townhouse Rental Proposal – Quantitative)**

Candidates were asked for a quantitative and qualitative analysis of the townhouse rental proposal on which the property management group has been working. This AO was for the quantitative part of the analysis of the Tangletree proposal. In Appendix V of the case, candidates were supplied with all of the information required to produce a reasonable quantitative analysis. They were also told to ignore income taxes in their analysis and to use 3% as a hurdle rate. Candidates were expected to provide a net present value (NPV) analysis of the potential investment and to conclude on the appropriateness of the townhouse project from both a quantitative and a qualitative perspective.

Overall, candidates performed well on this AO. Candidates were generally able to incorporate the information supplied in the case to quantify the potential investment. They discounted the appropriate inflows and outflows and determined a reasonable NPV. They typically incorporated all of the significant inputs, including the repaving requirements every 15 years and the resale land value, into their quantitative analysis.

Strong candidates performed detailed calculations, recognizing all of the following items within their calculations: all components of the initial investment, deliberately excluding the sunk costs related to the engineering study; the rental income generated, making a realistic assumption on the occupancy rate over the 40- to 50-year horizon; the operating costs related to the townhouses, including the property taxes pegged to the land and construction costs; the repaving costs of the parking lot assumed to be required every 15 years; and the estimated resale value of the land at the end of the project, assuming a 1.2% yearly appreciation rate over the duration of the project. These candidates then applied the hurdle rate required by Gloria to determine a NPV for the project.



Weak candidates had difficulty incorporating many of the items noted in the previous paragraph. In particular, they omitted the construction costs of the housing project or the resale value of the land at the end of the project, or they included the irrelevant sunk costs. Appendix V provided many items on a per unit basis or on a monthly basis, which required some mathematical manipulation to be converted to yearly cash flows. Some candidates made errors in their attempt. As well, some weak candidates used too short of a period (5 or 10 years) for their analysis, which was not useful to FRE. Others failed to heed the requirement to ignore income taxes in their analysis or ignored the requirement to use Gloria's hurdle rate of 3% (or both) and, therefore, wasted time on lengthy calculations that were unnecessary. Some very weak candidates did not know how to calculate a present value for the project, and, as a result, their analysis was not reasonable.

### **AO#9 (Townhouse Project – Qualitative Elements and Assumptions)**

FRE is contemplating the development of a new townhouse complex in Tangletree. Judy asked CPA to provide both a qualitative and a quantitative assessment of the project. She also asked CPA to assess the underlying assumptions that management made and that the candidate may have included in the calculations provided in the quantitative analysis. This AO addresses the qualitative aspects of the decision, along with an assessment of the reasonableness of the assumptions made by management. Candidates were expected to discuss the pros and cons of the townhouse project, using case facts to support their analysis.

Overall, candidates performed as expected on this AO. Most candidates were able to demonstrate a balanced discussion of the pros and cons of the project. Candidates understood that the project did not align with some aspects of FRE's mission and that the company lacked experience in managing construction projects in general, townhouses in particular. They also noted that the project was in line with FRE's desire to help the disadvantaged individuals of the Tangletree community, but that it contained various risks, such as the growing crime rate in that community and the environmental considerations associated with leaking oil tanks on the property.

Strong candidates discussed several benefits and risks associated with the new project. They understood the strategic implications of pursuing this development proposal and used their analysis to offer a well-supported recommendation. Some suggested ways in which FRE could mitigate risks that they had identified. Some strong candidates also addressed the reasonableness of various assumptions made by management regarding issues such as the occupancy rate of the 20-unit complex (over a 40- to 50-year horizon), the increase of the value of land over that period, the seemingly low maintenance expense, and the potentially higher costs linked to vandalism.

Weak candidates simply compiled a laundry list of case facts categorized as either pros or cons without adding any further analysis or value beyond these facts. Some weak candidates also restated the assumptions used in their NPV calculation, rather than questioning their reasonableness using the case facts.

**AO#10 (Debt Capacity and Financing Options)**

Candidates were asked to calculate FRE's debt capacity on its existing properties, as well as provide an assessment of two debt-financing options that were presented to the company as a replacement to its current line of credit. Appendix I provided candidates with the information on the maximum amount of debt that financial institutions are willing to loan on the basis of the value of the property taken as collateral (70% for developed land and buildings and 35% for vacant land), and Appendix V provided two options for FRE from a debt financing perspective. Candidates were expected to compare the two options and to conclude on the best option for FRE given its current condition. Both were lines of credit, but the first one (provided by Thedco Inc.) had generally advantageous financial conditions but more stringent and constraining restrictive covenants, where the second one (provided by Kanada Bank) was costlier but provided less restrictive covenants.

Overall, the performance of candidates on this AO was disappointing. A significant number of candidates were unable to properly evaluate FRE's debt capacity on its existing properties, either because they displayed a poor understanding of the concept or because they ignored this requirement altogether. As for the comparison of the debt financing options, most candidates were able to identify the key differences between the two options and were able to articulate why one option was superior to the other. The differences mentioned include some of the following: the interest rate/fees net of tax; the variable or fixed interest rate provided; the amount of cash that would be received under each option; the renewal terms; the covenants included; the compliance requirements; and the additional land financing incorporated in one of the options.

Strong candidates discussed many of the above items for both options, comparing the items in a logical and comprehensive manner. Many candidates also highlighted the more important items, such as the personal guarantee required from Gloria and the cancellability feature included in Thedco Inc.'s proposal. They also were able to use the fair values of the various properties owned by FRE and the corresponding mortgages provided in Appendix I to determine FRE's debt capacity, and they integrated that calculation within their comparative analysis of the two financing options. These candidates typically had a well-rounded, supported conclusion that flowed from their analysis.

Weak candidates were unable to perform an acceptable calculation of FRE's debt capacity on its existing properties. As for their comparison of the two financing options, they simply compiled a list of case facts categorized as either pros or cons for each option, without adding any further analysis or value. As a result, their conclusion was weakly supported and of little value to the client.

**AO#11 (Tenant Financing)**

Judy Kong asked CPA to discuss two options that FRE was contemplating in order to enable its tenants to purchase their own apartment more easily. The first option consisted of direct financing; i.e., making loans to the tenants directly in order for them to purchase their units. The second option was to guarantee the tenant's loan to a regular financial institution. The details of the two options were provided in Appendix V. To demonstrate competence on this assessment opportunity, candidates were expected to perform a reasonable comparison of both options or explain that both options contained significant risk from FRE's perspective.

Overall, candidates struggled with this AO. A significantly high number of candidates skipped this AO altogether. It was the most difficult AO in the Finance role, and candidate performance was weakest on it. Most candidates realized that both options provided benefits for the tenants that were in line with FRE's philanthropic mission, but they generally focused their analysis on details of the two proposals rather than on the more basic difference between them; i.e., the large cash inflow associated with the second option that was absent in the first option. The candidates also did not realize the magnitude of the risk generated for FRE by both options, and very few addressed the merits of the idea of financing low-income tenants, either directly or indirectly.

Strong candidates provided an analysis of the options that focused on the basic difference between the two options, rather than on the details associated with them. They generally recommended revisiting the idea of financing tenants altogether, deeming the whole idea as too risky for FRE and as potentially jeopardizing its ability to continue to provide affordable housing in the future.

Weak candidates analyzed the options from the tenant's point of view rather than FRE's standpoint, which made the analysis less useful for FRE. They focused on the details of both options rather than on the big picture. They failed to realize that both options generated a significant risk for FRE and that the first option (direct financing) required FRE to finance the repayment of its own mortgage liability upon the sale of the property to the tenant, while the second option required no such financing.

**AO#12 (Financial Position and Analysis of Returns)**

Judy Kong asked CPA to assess FRE's overall financial position, as well as determine if it had met its 3% return on sales and return on equity objectives. Candidates were expected to provide a useful ratio analysis, calculating and interpreting ratios that were ideally focused on the balance sheet ratios that are suited to the real estate industry, as well as ratios used by Gloria as thresholds, return on sales and return on equity.

Overall, candidates performed well on this AO. Most candidates selected appropriate financial position ratios relevant to FRE's industry (debt-to-equity ratio, current ratio, interest coverage ratio, etc.) and analyzed each of the ratios appropriately, noting where FRE's ratios displayed a strong or weak financial position. They also calculated FRE's return on sales and return on equity for the 11-month period ended on August 31, 2017, and assessed whether the 3% target would be achieved.

Strong candidates generally used their adjusted financial statements to compute the ratios and tied in case facts to support their analysis. For example, strong candidates realized that the BOT project had an important impact on the debt-to-equity ratio, and that this impact was only temporary since the project would be completed in a few months at most. They also realized that the seemingly high debt-to-equity ratio was normal in the real estate industry and that FRE was, in fact, under-leveraged compared to its peers. Many strong candidates linked their financial reporting discussion on the potential impairment of the Tangletree, Largent, and Atman properties to their evaluation of FRE's financial position. Some candidates also provided an overall conclusion on FRE's financial position. They not only calculated whether the 3% threshold would be met for the return on sales and return on equity ratios, but also commented on the levels of these ratios to support their analysis of the underlying causes of the good or bad performance noted. Most of these candidates linked their analysis to the unusual philanthropic nature of this private company, where maximization of returns was not the main focus behind the actions of its shareholder.

Weak candidates were generally able to calculate appropriate ratios, but their interpretation of the ratios was often generic and superficial, limited to stating that the ratio was either higher or lower than that of the industry, and they rarely used case facts to support their analysis. These candidates did not explicitly state whether FRE's financial position was weak or strong compared to the industry and to FRE's historical financial position. They calculated the return on sales and return on equity ratio and compared them to the 3% target, but their analysis remained arithmetical, and they showed no real attempt to explain the reasons behind the encouraging or disappointing performance noted. Some very weak candidates calculated a whole set of very generic ratios and gave explanations that failed to take into account that FRE was in the business of operating rental properties, rather than selling goods and holding inventory, so their analysis was of little use to FRE.

**AO#13 (Bates Foundation Offer)**

Candidates were told that FRE had received an offer from the Bates Foundation of America (BFA) to purchase newly issued shares issued representing 45% of the common shares outstanding after the transaction. BFA's offer mentioned a range of prices from \$9 million to \$10 million, as well as numerous conditions attached to the potential investment, detailed in Appendix V of the case. Judy asked for CPA's views on the investment offer. Candidates were to assess the BFA offer both qualitatively and quantitatively, exploring the implications of the offer on FRE's operations. They were expected to assess whether the qualitative aspects of the offer provided a good strategic fit with FRE's projects and business model and to realize that the offer provided a significant cash inflow that could help solve many of the company's current issues. Candidates were also expected to use an asset-based approach to evaluate the company's shares, given the nature of the assets (real estate) and the business model of the company that systematically charged lower-than-market rent.

Overall, candidates performed well on the qualitative aspect of this AO. Most were able to address the conditions attached to this investment and to discuss the implications on FRE's operations and the fit with FRE's unique business model. Most candidates were appropriately concerned by Gloria's potential loss of control of FRE through the numerous seats on the board that BFA would be obtaining, as well as by the impact on FRE's reputation of being associated with a foundation involved in controversial funding of genetically modified crops.

As for the quantitative aspect of this AO, candidates performed very poorly. Very few candidates attempted to determine the value of FRE's shares in order to compare it to the offer for 45% of the shares made by BFA. Most candidates, seeming to have been taken by the philanthropic nature of FRE, appeared to forget that it was a private company with a shareholder and that the offer was, in fact, the sale of a part of her business. They seemed to address this AO as though they were analyzing a restricted contribution to a non-for-profit organization rather than a business purchase. The few candidates who did attempt a valuation used an asset-based approach.

This AO gave the candidates numerous occasions to display integration skills, and strong candidates were able to do so. Strong candidates also realized the magnitude of the cash inflow associated with the offer. They linked this to other initiatives put forward by FRE in order to generate cash or that required large cash inflows (debt financing in AO#10; Ole Tower luxury apartment in Common AO#2; the tenant financing idea in AO#11).

Weak candidates, again, simply compiled a laundry list of case facts categorized as either pros or cons for the offer without adding any further analysis or value. As a result, their conclusion was weakly supported and of little value to FRE

**AO#14 (Weighted Average Cost of Capital)**

Judy Kong asked CPA to provide a calculation of FRE's weighted average cost of capital, assuming that its current capital structure is its target capital structure. CPA was also asked to provide comments on the various elements included and the assumptions made. Candidates were expected to prepare a reasonable calculation of FRE's costs of debt and equity and to come up with reasonable weighting for them based on FRE's current capital structure.

Candidates generally performed very well on this AO. Most candidates successfully performed calculations that included a reasonable cost of debt, a reasonable cost of equity, and a reasonable attempt at a target capital structure, thereby providing useful information to FRE.

Strong candidates performed detailed calculations, recognizing all of the following items within their calculations. First, they incorporated a reasonable cost of debt, net of tax, with case facts used to support the interest rate and the tax rate used in the calculation. These candidates often used the information provided in Appendix V related to the two financing options proposed by Thedco Inc. and Kanada Bank (AO#10) to make their estimation of the incremental cost of debt, and they used FRE's statement of operations presented in Appendix IV to estimate FRE's tax rate. This showed good use of integration skills by those candidates. Second, they incorporated a reasonable cost of equity, using the capital asset pricing model to make the estimation. The relevant information for this calculation was presented to the candidates in a table showing the rental property statistics in Appendix V. Third, they made a reasonable attempt at a target capital structure. These candidates generally used FRE's balance sheet, adjusted to reflect the financial reporting adjustments recommended in the common AOs, to calculate the company's debt-to-equity ratio, and they used this ratio in their calculation. Some strong candidates attempted to calculate FRE's debt-to-equity ratio based on the market value of the properties, rather than on their book values. Others compared their response to the hurdle rate of 3% set by Gloria and concluded that constantly investing money at a rate that is lower than the cost of capital would slowly burn up FRE's wealth and would, over time, reduce its capacity to fulfill its mission of providing affordable housing, unless it obtained government assistance or capital inflows like the one offered by BFA.

Some weak candidates displayed a poor understanding of the capital asset pricing model and appeared to have memorized its formula without having fully understood its meaning. Other weak candidates used the industry's debt-to-equity ratio rather than FRE's target capital structure, as clearly requested by Judy. Others only calculated the cost of equity, and they seemed to think that the cost of equity and the weighted average cost of capital were equivalent.

<b>Paper/Simulation:</b>	<b>Day 2 (FRE) – Role Case PERFORMANCE MANAGEMENT</b>
<b>Estimated time to complete:</b>	300 minutes
<b>Simulation difficulty:</b>	Average
<b>Competency Map coverage:</b>	Performance Management role (8 Assessment Opportunities)

### **Evaluators' comments by Assessment Opportunity (AO) for the PERFORMANCE MANAGEMENT ROLE**

#### **AO#8 (Risk Analysis and Mitigation)**

Candidates were asked to identify the risks to FRE and to recommend ways to mitigate those risks. Candidates were expected to filter the information provided in the common section in order to perform a risk analysis of the internal and external environment and also include a reasonable mitigation for the described risks. Generally, to demonstrate competence, candidates were expected to discuss different risks that FRE was facing, along with a reasonable mitigation strategy.

Candidates performed reasonably well on this AO. Most candidates were able to discuss a wide variety of external risks provided in the case, such as rising interest rates, the declining population of young people in the two cities, and decreasing government funding. Candidates also discussed a variety of internal risks, such as increased vandalism, aging buildings, the crack in the Atman building, and Gloria's decreasing involvement with FRE. Most candidates were able to provide appropriate mitigation strategies given the limited case facts.

Strong candidates were able to identify more risks and provide reasonable mitigations. Many of these candidates discussed a balance of internal and external risks in depth and provided logical mitigation strategies. A common example of a well discussed risk is the risk of rising interest rates. Strong candidates realized, from looking at the table of properties, that FRE has a large number of variable rate mortgages, and they recommended going to the bank to move some of these over to fixed-rate mortgages.

Weak candidates failed to discuss a sufficient number of risks, or they attempted to discuss several risks but their discussions stayed at surface level and they did not explain their logic in sufficient depth. The format many weak candidates used was point-form short statements or sentences, resulting in what were often incomplete thoughts. For example, under the heading "Risk," they may have written a statement like, "Strikes increasing in other towns." This left the markers wondering why this was a risk or asking, "And then what?"

**AO#9 (Outsourcing – Quantitative Analysis)**

Candidates were asked for both a quantitative and a qualitative analysis of the proposal to outsource the maintenance function. For the quantitative portion of the analysis, candidates were expected to determine the net effect of outsourcing the maintenance department as compared to the current maintenance expense, taking into account the variables provided in Appendix V under "Other Activities." Some variables could have been interpreted two different ways (e.g., the one-time refund of \$48,000 could have been a refund that FRE either received or gave), and both were accepted. To demonstrate competence, candidates were expected to separate one-time costs from ongoing costs, make adjustments to both the bid prices and current maintenance expense, and determine the net cost or benefit.

Candidates performed adequately on this AO, with a majority of candidates making a reasonable attempt at determining the net effect of outsourcing. Most candidates took the approach of normalizing the current repairs and maintenance expense, adjusting the bid prices, and accounting for one-time costs like terminations and selling of equipment. Some candidates were able to get to the same result using an incremental approach.

Strong candidates included all the variables appropriately, determined the net effect of outsourcing, and calculated the net effect for the first year versus ongoing years. Better candidates went further, recommending the highest bid price FRE should accept.

Weak candidates made a variety of errors. Many mixed the one-time costs with the ongoing costs, excluded some of the variables from their calculations, or only calculated the net effect for one of the bid prices. Many weak responses were poorly labelled and difficult to follow, with confusing, poorly explained calculations.

**AO#10 (Outsourcing – Qualitative Analysis)**

Candidates were asked for both a quantitative and a qualitative analysis of the proposal to outsource the maintenance function. For this second part of the analysis of the outsourcing option, candidates were expected to provide a qualitative analysis and a recommendation that integrated both their quantitative analysis and their qualitative analysis. The qualitative analysis should have included a variety of facts that were in the common Appendix I (e.g., FRE has never laid off an employee, and laying off the entire maintenance department would be detrimental to FRE's reputation, hurt employee morale, and take away from one of FRE's strengths) and in the Performance Management section in Appendix V (e.g., employees of an FRE contractor were recently seriously injured, and FRE received a lot of negative press; by outsourcing, FRE could be more susceptible to future similar incidents). The qualitative and quantitative information within the case was not biased toward outsourcing, so either recommendation was acceptable, but it had to be consistent and supported with the analysis.



Candidates performed reasonably well on this AO. Most candidates presented their qualitative discussion in a pro/con format using case facts. Typically, candidates discussed pros for outsourcing, like the elimination of delayed repairs and the bidders having a network of skilled tradespeople. Commonly used cons included negative impact on employee morale and the possibility of a strike if the union found out before being laid off. Candidates' recommendations aligned with both their quantitative and qualitative analyses.

Strong candidates provided a balance of pros and cons that were well described, and they clearly explained the benefit or disadvantage of each. The recommendation was well supported by both their quantitative and qualitative analyses. Better candidates went further, to include points that linked to the mission or key success factors or both. For example, they would recognize that efficient operations were a key success factor and used that as a pro for outsourcing, since bidding companies had a network of skilled tradespeople. Strong candidates also provided next steps after their recommendation. For example, if they recommended keeping the maintenance in-house, they would also suggest implementing additional training and code-of-conduct policies in an attempt to address the long breaks and delayed repairs by the existing maintenance staff.

Weak candidates provided pros and cons but lacked depth of discussion, or they discussed very few of them. Many of these candidates lacked balance, discussing just pros or just cons. Many of them also presented their analysis in short bullet points that did not convey clear thoughts or were simply restated case facts. For example, many stated, "Maintenance staff are unionized," which did not convey whether this point supported or opposed the outsourcing. Many weak candidates also restated parts of their quantitative analysis as part of their qualitative pros and cons. For example, some stated as a pro that it would be cheaper to outsource. In addition, some of these weak candidates made a recommendation based solely on their quantitative analysis, even though they provided some qualitative analysis.

### **AO#11 (Management Incentive Scheme)**

Candidates were asked to evaluate the organization's management incentive schemes at the various levels below vice-president and to suggest better metrics. Candidates were provided with a list of three levels of manager (property manager, maintenance manager, and superintendent) and the current incentive scheme in Appendix V. To demonstrate competence, they were expected to evaluate the organization's management incentive schemes for the various roles and to suggest better metrics for each one.

Candidates performed well on this AO. Most candidates were able to provide a reasonable critique of the current incentive scheme, many of them discussing the management's lack of control over the current measures. Most candidates recommended reasonable improvements to the performance measures for each of the three levels of manager. For the maintenance manager, many candidates recommended measures related to maintenance costs or employee training, since the maintenance staff often had repair delays. For the property managers, many recommended measures focused on costs related to efficiency or the occupancy rate, which linked to maximizing revenue. For the superintendents, many candidates recommended a tenant survey, since the superintendents are the point of contact for tenants.

Strong candidates provided several suitable measures for each of the manager levels and linked the measure to the mission or key success factors or both (e.g., occupancy rate and efficient operations). Some strong candidates were able to present improved metrics through a balanced scorecard, with case-specific metrics like the targeted pre-tax return on sales of 3%. Strong candidates also discussed the unethical property manager, who received a bonus even though he broke the rules and put friends ahead of other people on the waiting list.

Many weak candidates spent too much time on one of the managers and missed one of the other two levels of manager, or they neglected to critique any of the existing incentive schemes. Some weak candidates provided metrics that were inconsistent; for example, noting that property managers had no control over rent charged, but recommending that each be evaluated on the profit of their buildings.

### **AO#12 (Misaligned Activities)**

The case states that Judy thinks some of FRE's recent activities do not align with the company's mission, and she requested CPA's thoughts on this. To demonstrate competence, candidates were expected to discuss several of the major activities FRE has undertaken and how they align or do not align with the mission. There were many detailed projects in the case that the candidates could have discussed, notably the Rent-to-Own (RTO) program, the Build-Operate-Transfer (BOT) project, the luxury apartments, and the outsourcing proposal. There were also other minor activities in the case that candidates could have discussed, such as the vacant land for speculative purposes, the Carter property, the properties modified for handicapped tenants, and the townhouse rental complex in Tangletree.

Candidates performed adequately on this AO. Most candidates were able to identify and discuss several activities. Most discussed the luxury apartment project and whether it aligned with the mission. Candidates could take the perspective that, because the luxury property project helps FRE subsidize the affordable properties, the activity aligns with the mission, or they could argue that the project does not align because it is a luxury property that is not affordable. Both perspectives were acceptable as long as the candidate provided sufficient discussion to support their conclusion.

Strong candidates were able to discuss several activities in greater depth. Many of these candidates considered both sides of the discussion (e.g., the luxury apartment project is aligned or not aligned with the mission, depending on the interpretation) and tended to focus their discussion on the bigger projects (i.e., RTO, BOT, and the luxury apartments).

Weak candidates covered fewer issues and provided less explanation. Most identified one of the activities and simply concluded that it did or did not align with the mission. Weak candidates also tended to be very literal in their interpretation of the mission; for example, some simply stated that the townhouses did not align with the mission because they were townhouses, not apartments. Weak candidates also discussed events that were not in FRE's control, such as the injured contractor's employees and young residents moving away, as not aligning with FRE's mission.

**AO#13 (Mission Statement)**

Judy also asked CPA to comment on the current mission statement and recommend improvements, with sufficient explanation and support. The case provided a short but explicit mission statement for FRE: "To provide affordable rental apartments." For this AO, candidates were expected to critique and improve the mission statement to demonstrate competence. The improvement could be a discussion of suggested revisions with explanations. For example, candidates could state that an element of a good mission is to identify the key market that FRE is focused on, and then could suggest that young individuals and families be a part of the mission statement. Candidates could also provide a revised mission with some discussion to justify their revisions. For example, candidates could suggest the mission be revised to, "To provide affordable rental apartments for residents of Bluebell and Prince Joel," and explain why they added the words "residents," "Bluebell," and "Prince Joel."

This AO was considered the most difficult AO in the PM role and candidates struggled with it the most. While the majority of candidates attempted it, few met the expectations set. Most candidates were able to critique the current mission to a degree, but many struggled with suggesting a reasonable new mission or providing sufficient discussion to substantiate their revised mission. Many candidates made only a simple revision to the mission (for example, "To provide affordable rental apartments *for young people*") and then provided a limited follow-up discussion, such as mentioning that since FRE is focused on young people, they should be included in the mission.

Strong candidates were able to critique and provide several discussion points to justify their revised mission. These candidates stepped back to consider the big picture, including Gloria's goal for the company and FRE's philanthropic nature. These candidates also considered the macro environment changes that FRE should consider in the future. For example, FRE is focused on young individuals and families; however, young people are leaving Bluebell and Prince Joel, so FRE should consider revising its mission to address many age groups or focus on older people in the community. Strong candidates also suggested the addition of a vision statement that complemented the new mission statement and discussed the difference between a mission and a vision.

Weak candidates struggled with making suggested improvements to the mission. They focused on past and current activities and used those as the basis for changing the mission. These candidates did not realize that it is wrong to let actions dictate the mission, versus the mission dictating actions. For example, these candidates recognized the luxury apartment project and suggested that FRE should change its mission to provide both affordable and luxury apartments. However, a mission statement is intended to guide a company's actions, and these candidates missed this fundamental concept.

**AO#14 (Reports)**

Candidates were told that management and the board only receive quarterly income statements, and Judy asked what additional information could be provided to help the board and management make better operational and strategic decisions. To demonstrate competence, candidates were expected to identify and discuss a variety of reports for both the board and management using the information in the case related to key success factors, the mission, external or internal risks, the incentive scheme, and industry-related metrics.

Candidates struggled with this AO more than expected. Most candidates provided a mix of generic financial reports (e.g., cash flow statement and balance sheet) and reports that related more specifically to the company and industry. Many candidates included measures related to occupancy rates and recognized that each building should report on metrics like rent collected and maintenance budget variances.

Strong candidates provided reports that related back to key success factors, like occupancy and operating efficiency, as well as reports that related to previous analysis (e.g., progress reports on the BOT project or purchases in the RTO program). Also, their discussions tended to be more thorough, usually including the benefit of each recommended report. Strong candidates also recognized that the needs of the board and management are different and that, therefore, different types of reports should be provided for both groups. For example, the board should get high-level reports, like reports on the 3% targets, overall occupancy rates, and progress on major projects like the BOT project. Management should get operational reports, like accounts receivable on rent collections per building and variance reports on maintenance spending.

Many weak candidates discussed just the generic reports; for example, they recommended a cash flow statement and elaborated on its benefits from a theoretical point of view. Other weak candidates simply provided a laundry list of financial reports (e.g., balance sheet, variance report, depreciation schedule), with little to no discussion.

**AO#15 (Board of Directors)**

Candidates were asked for their views on FRE's current governance structure and to provide recommendations for improvement. To demonstrate competence, candidates were expected to discuss several elements, which they could do through a mix of critiquing the current board structure and recommending improvements.

Candidates performed relatively well on this AO. Most candidates were able to critique the current structure and discuss many improvements, including adding more expertise to the board (such as an accountant or someone in the real estate industry) and forming small committees, particularly an audit committee to help resolve and avoid financial reporting issues.

Strong candidates were able to discuss many elements for improvement beyond the three common elements noted above (critique, adding more expertise, forming committees). They discussed elements such as the need to bring in independent individuals to challenge Gloria, since the current board just agrees with her; the fact that the role of the board is to provide strategic direction; advice on the role of the chair and CEO and how best practice would be to separate the two roles; and the fact that since FRE is a small company, not all best practices make sense (e.g., multiple committees are likely not necessary).

Many weak candidates provided only a couple of points, often the less significant ones, such as increasing the frequency of meetings and bringing on another board member so there is an odd number. Other weak candidates did not provide support for their discussions; for example, suggesting the board form committees, such as nominating, audit, and compensation committees, without explaining why this would be beneficial. Very weak candidates recommended taking the sole owner of the company, Gloria, off the board because she is the CEO.

<b>Paper/Simulation:</b>	<b>Day 2 (FRE) – Role Case TAXATION</b>
<b>Estimated time to complete:</b>	300 minutes
<b>Simulation difficulty:</b>	Average
<b>Competency Map coverage:</b>	Taxation role (8 Assessment Opportunities)

### **Evaluators' comments by Assessment Opportunity (AO) for the TAXATION ROLE**

#### **AO#8 (Owner Remuneration)**

Candidates were asked to discuss how Gloria, FRE's owner, withdraws money from FRE, including any benefits she currently receives, and to suggest alternatives to the existing strategy, considering the impact to FRE. To demonstrate competence, candidates were expected to demonstrate an understanding of the concept of integration through their discussions of Gloria's existing income and benefits.

Candidates generally performed well on this AO. Most candidates provided some discussion of salary versus dividends, considering the impact to both Gloria and FRE, thereby demonstrating an understanding of integration. Most candidates discussed at least one of the taxable benefits in some depth.

Strong candidates identified the option to change the mix of salary versus dividend, explaining the basics of how each of these works and elaborating on several qualitative factors (such as impact on RRSP room, CPP contributions, and types of dividends). Most of these candidates provided clear recommendations, often identifying the ability to pay dividends tax-free out of the capital dividend account and/or the large paid-up capital balance. Strong candidates also discussed one or both of the taxable benefits.

Many weak candidates demonstrated that they did *not* understand the fundamental principles of tax integration. In many cases this took the form of focusing on one side of the salary/dividend equation or the other – for example, suggesting that dividends were always better than salaries due to the dividend tax credit, or suggesting that salaries were always better than dividends because they were deductible from corporate income. Many weak candidates also recommended a shareholder loan as a way for Gloria to take money out tax-free, failing to recognize that she would not be able to pay it back within the required time. Weak candidates also typically either drew incorrect conclusions around the taxable benefits or did not address them at all.

#### **AO#9 (Acquisition of Control and Loss of CCPC status)**

Candidates were asked to provide an analysis of the income tax implication of an investment offer from the Bates Foundation of America (BFA). The case facts provided made it clear that BFA would acquire de facto control (despite the acquisition of fewer than 50% of the shares), which would trigger an acquisition of control as well as the loss of Canadian controlled private corporation (CCPC) status. To demonstrate competence, candidates were expected to identify both of these changes and discuss some of the impacts.

Candidate performance on this AO was average. Most candidates identified the possibility of an acquisition of control and/or the loss of CCPC status by identifying that, while de jure control would not be lost, de facto control would be (the discussion was usually linked to the board of directors' requirement). They then went on to briefly identify some, but not many, impacts of these changes.

Strong candidates clearly discussed the difference between de jure and de facto control, and they used several case facts to support why de facto control would be lost and why this would lead to both an acquisition of control and the loss of CCPC status. They then went on to identify many or most of the impacts of these changes.

Most weak candidates did not address the acquisition of control at all, focusing instead on the CCPC status. These candidates concluded either that CCPC status would not be lost, because only 45% of the shares were being given up, or that CCPC status would be lost, because Canadian shareholders would represent less than 100%. This is not applying the correct rule.

### **AO#10 (Planning to Address Acquisition of Control or CCPC Status)**

Candidates were asked to discuss some planning opportunities to ensure FRE consistently minimizes tax after the investment by BFA. They were also reminded that Gloria wants to ensure that her personal taxes on future share dispositions are minimized. To demonstrate competence, candidates were expected to come up with at least one planning measure to address either the acquisition of control or the loss of CCPC status.

Candidates struggled with this AO, which required them to be creative and come up with planning measures on their own. However, most candidates were able to recommend a planning strategy to address the acquisition of control or CCPC status loss. These strategies most commonly involved using section 85 to perform an estate freeze to use the lifetime capital gains deduction (LCGD), using the bump election available on the acquisition of control to use up losses, renegotiating the terms of the offer to avoid the loss of de facto control altogether, or paying dividends to use the RDTOH balance.

Most strong candidates focused on the more significant planning measures available, such as using section 85 to perform an estate freeze to use the LCGD and using the bump election available on the acquisition of control to use up losses. Most strong candidates also identified more than one planning measure and recommended one or a combination of measures to address the issues.

Weak candidates either did not address this AO at all or provided tax-planning strategies that would not address the problems identified and/or that would be completely impractical or impossible to do. Many weak candidates suggested using elections that simply do not exist, or they suggested creating overly complex corporate structures for no obvious reason.

**AO#11 (Donation of Private Company Shares to Charity)**

Candidates were asked for a discussion of the personal tax implications to Gloria of donating some or all of her shares of FRE to a Canadian registered charity. To demonstrate competence, candidates were expected to identify that a deemed disposition would occur at fair market value and that a charitable donation receipt would be available for the value of the shares.

Candidates performed relatively well on this AO, despite some challenging pieces to the analysis. Most candidates identified that a charitable donation credit would be available, although they varied on the amount they believed would be available (some believed the amount would be cost rather than fair value). Most candidates also identified a potential deemed disposition of the shares, but many did not recognize that this would occur at fair market value (or they concluded that there would be no disposition or that the disposition would have a 0% inclusion rate, confusing it with public shares).

Strong candidates identified that a charitable donation credit would be available for the fair market value of the shares, and they clearly identified that a deemed disposition of the shares would occur at fair market value, which would trigger a capital gain. This usually led them to identify the ability to use the lifetime capital gains deduction against the gain. Many strong candidates clearly identified that, in contrast to public shares, private company shares are not eligible for an exemption on the capital gain from the deemed disposition.

Weak candidates identified the charitable donation credit, but many discussed this in a technically incorrect manner (for example, suggesting that it was a deduction from income) or discussed it only briefly. They also either ignored the deemed disposition altogether or stated simply that there would be no tax implications because the shares were being donated, without even acknowledging the possibility of a deemed disposition.

**AO#12 (Stock Option Plan)**

Candidates were asked to discuss the tax implications of a proposed stock option plan for both the company and the employees. To demonstrate competence, candidates were expected to explain several tax aspects of the stock option plan presented.

Candidates performed very well on this AO. Most candidates explained that an employment benefit would be calculated based on the difference between fair value at the date of exercise and the option exercise price, and they identified that the benefit would not be included in income until the sale of the underlying shares took place, since FRE is a CCPC. Candidates typically also either identified the potential availability of the stock option deduction or discussed the deductibility to the corporation of the costs.

Strong candidates clearly explained each component of the stock option plan: the employment benefit, the deferral, the stock option deduction, and the taxable capital gains or allowable capital losses. They also explained that any expense claimed for financial statements purposes could not be deducted by the corporation for tax purposes.



Weak candidates typically made several significant technical errors. Such errors included incorrect descriptions of the employment benefit calculation (often stating that the entire gain from exercise price to disposition value was a taxable benefit), erroneous discussions of the timing of the benefit and/or deduction, and explicit statements that the stock option expense to be recorded on the income statement would be deductible by FRE.

### **AO#13 (Application of Subsection 13(21.1), and Correction of Prior Year Errors)**

Candidates were told that Judy, the controller, would like them to confirm whether or not subsection 13(21.1) was applied correctly to a disposition of land and building, and also to explain how to correct any errors found in a prior year return. Candidates were explicitly directed to the subsection of the Income Tax Act to encourage their use of the resources available to them and to ensure they had the ability to uncover the error even if they were not familiar with the rule. To demonstrate competence, candidates were expected either to apply subsection 13(21.1) to the case facts and attempt to recalculate the gain or to identify the nature of subsection 13(21.1) and explain how to correct errors.

Candidate performance on this AO was average. Most candidates identified that subsection 13(21.1) had something to do with the terminal loss being claimed on the building, although many could not get much further than recognizing that something was not right. Most candidates also recommended that an amended return be filed and attempted to identify the deadline for doing so; however, the deadline provided by most candidates was incorrect.

Strong candidates identified that a terminal loss on a building when the subjacent land has a capital gain is not allowed by the Income Tax Act. Most then went on to perform either the correct calculation (reallocating just enough proceeds to eliminate the capital gain) or an almost correct calculation (reallocating proceeds to completely eliminate the terminal loss). They also went on to recommend amending the 2015 tax return before the statute-barred date of three years after the date of the notice of assessment.

Many weak candidates stated explicitly that subsection 13(21.1) had been followed properly on the original return, usually summarizing the provision in a way that clearly showed they did not know what the provision was for and without attempting to address the problem at a conceptual level. Many other weak candidates ignored the subsection 13(21.1) part of the required altogether. These candidates often attempted the return correction issue without actually recommending the return be amended, and most of them made erroneous statements about deadlines.

### **AO#14 (Barter Transaction)**

Candidates were asked to describe the tax implications of a non-monetary transaction involving a swap of one building with subjacent land for another building with subjacent land. Candidates were told that the tax partner at Fox & Fanoo, LLP reminded the controller that the property would not qualify as a replacement property because it is rental property, because she had originally treated the transaction as such. To demonstrate competence, candidates were expected to identify (at a conceptual level) that a barter transaction had taken place and to attempt a calculation reflecting that the transaction was deemed to have taken place at fair market value.

Candidates did not perform well on this AO. Despite the clear information provided by an authoritative source (the tax partner) and the fact that the replacement property rules indeed did not apply, many candidates attempted to analyze whether or not the replacement property rules would apply to this transaction. Many concluded that the partner was actually incorrect. Some candidates made up for making an erroneous conclusion by explaining what would happen if the rules did not apply anyway.

Strong candidates recognized that, since the replacement property rules did not apply, the transaction was deemed to have occurred at fair market value. They then went on to attempt a calculation of the gain or loss that would occur as a result, integrating a fair value amount of either property.

Most weak candidates concluded, with little to no analysis, that the partner was wrong and that the replacement property rules were applicable. This was usually followed by little to no attempt at any calculation of the impact of the transaction – simply a statement that everything was fine as is.

### **AO#15 (Non-arm's Length Transfer of a Property to a Corporation)**

Candidates were asked to discuss the personal and corporate tax consequences of a planned transfer of the Fish Street property to FRE. They were asked first to explain the consequences assuming Gloria sells the property to FRE for exactly \$1 million in cash, and then to provide advice on any steps that could be taken to minimize the consequences. To demonstrate competence, candidates were expected to explain the double taxation that would occur based on a \$1 million sale (that is, a deemed disposition for Gloria at fair market value, without a corresponding increase in the adjusted cost base for FRE) and to come up with at least one way to solve this problem.

Candidates performed quite well on this AO, despite its challenging nature. Most candidates identified that double taxation would occur if Gloria sold the building to FRE at \$1.0 million instead of its \$1.4 million fair value, usually explaining briefly the mechanics of how this would work. They then went on either to recommend selling at fair market value instead or to identify the ability to use section 85.

Strong candidates provided a more detailed explanation of the mechanics of the double taxation that would result from a \$1 million sale, many providing calculations to support this discussion. They then went on to recommend using section 85 to perform the transaction instead, outlining the mechanics of how the transaction would take place.

Many weak candidates identified the double taxation issue incorrectly. Their discussions often suggested that they believed Gloria would be taxed on the \$1.0 million FRE would pay her, and some even suggested that, despite Gloria paying tax on the lower amount, FRE would have an adjusted cost base in the property equal to the \$1.4 million fair value. Few weak candidates addressed any planning to improve the transaction.

**BOARD OF EXAMINERS' COMMENTS ON DAY 3 SIMULATIONS**

<b>Paper/Simulation:</b>	<b>Day 3, Case 1 (ECCS)</b>
<b>Estimated time to complete:</b>	90 minutes
<b>Simulation difficulty:</b>	Average 1
<b>Competency Map coverage:</b>	Assurance (2); Financial Reporting (1); Finance (1); Management Accounting (1); Taxation (1); and Strategy and Governance (1)

**Evaluators' comments by Assessment Opportunity (AO)****AO#1 (Cash Flow Projection)**

Candidates were asked to prepare a before-tax, three-year cash flow projection. Details relating to ECCS's revenue streams and the rates charged by ECCS for its services were provided in Appendix I. Appendix II provided the draft financial statements for 2016, as well as several notes containing information to allow the candidates to assess how the cash flows would change in the upcoming years. In order to demonstrate competence, candidates had to prepare a three-year cash flow projection that included several items, and they had to demonstrate an understanding of the difference between cash flow and income.

Candidates performed well on this AO. Most candidates presented a three-year cash flow projection that incorporated many of the anticipated changes from the 2016 figures. Candidates generally demonstrated an understanding of the difference between cash flow and income by appropriately including or excluding at least one of the items that would differ between the two, the most common being the exclusion of depreciation. Most candidates included cash inflows for the company's four revenue streams, but not all performed the calculations correctly when incorporating the change in capacity that would result from the planned renovations. The revenue from drop-in spaces was most often calculated incorrectly because many candidates did not accurately incorporate both the change in utilization and the change in number of spaces from the renovations, or they did not correctly reflect the timing of these changes.

Strong candidates were able to accurately calculate most of the forecasted figures, integrating the information from various parts of the case by including items that were not part of the income statement, such as the cost of renovations, proceeds of the bank loan, and the grant claw-back. These candidates also demonstrated a greater depth of understanding of the difference between cash flows and income by incorporating more than one of the items that would differ between the two, such as mortgage principal or the exclusion of the loan interest that was not payable until the end of the term of the loan.

Weak candidates provided an incomplete cash flow projection that incorporated few of the inflows and outflows that changed over the years, and they incorrectly calculated many of the forecasted figures. Weak candidates did not demonstrate an understanding of the difference between cash flow and income, since their cash flow was based on the income statement provided and they did not adjust for items such as depreciation or mortgage principal.

### **AO#2 (Crowdfunding Contributions)**

Candidates were asked to address the accounting treatment of the crowdfunding contributions, since the manager had noted a concern in this area. Candidates were given specific information regarding the two types of contributions offered by the company (\$20 and \$200), as well as the funds raised and the benefit attached to each of the contribution levels. In order to demonstrate competence, candidates were expected to provide a reasonable analysis of the accounting treatment, using *Handbook* guidance and case facts to support their discussion. Candidates were required to recognize the need to apply the guidance separately to the two parts of the \$200 crowdfunding contribution (\$80 spa voucher and \$120 with no benefit attached).

Candidates struggled on this AO. Candidates performed better when addressing the \$20 contribution level, to which no benefit was attached. However, candidates did not always recognize that the *Handbook* criteria should be applied to the two parts of the \$200 contribution separately. Of those candidates who did see that the two parts had to be assessed separately, the analysis provided by many of them lacked depth. Candidates often did not refer to the criteria for revenue recognition, and it was not always clear whether their conclusions were based on accounting standards. In addition, the lack of reference to the *Handbook* also meant that candidates did not attempt to assess all three criteria, despite the availability of case facts that would have allowed them to conclude on these quite easily.

Strong candidates addressed both the \$20 and \$200 contribution levels. They were able to identify the correct *Handbook* criteria on revenue recognition and recognized the need to apply them to the two parts of the \$200 contribution separately. For each of the contribution levels, strong candidates applied specific case facts to each criterion in order to support their analysis. Strong candidates included clear conclusions that were consistent with their analysis.

Weak candidates either attempted to apply *Handbook* standards that were not relevant in this case, such as NPO accounting standards relating to the restricted method and the deferral method, or identified that this was a revenue recognition issue, but their discussion lacked depth. Many weak candidates jumped to a conclusion without supporting it through reference to *Handbook* criteria and case facts, or they failed to recognize the need to address the two parts separately, which usually led them to an incorrect conclusion that the current accounting treatment for the \$200 contributions was correct.

**AO#3 (Grant Claw-Back)**

Candidates were asked by the client whether ECCS would need to repay any of the 2016 grant and whether any subsequent grant amounts may need to be repaid. This request was included in the notes to the financial statements in Appendix II. Details on the terms of the grant and the conditions that would require repayment (claw-back) were provided in Appendix III, including the calculation basis for each of the three thresholds. Candidates were expected to integrate information and analysis from other areas of the case and from their cash flow projection in AO#1 to perform the calculations required to draw conclusions as to whether repayments would be required. In order to demonstrate competence, candidates were expected to calculate multiple thresholds based on the definitions provided, for 2016 and subsequent years.

Candidates struggled on this AO. Some candidates did not recognize both parts of the client's request and addressed either only 2016 or only the subsequent years. Candidates seemed to be overwhelmed by the requirement for numerous calculations, and not all recognized that their cash flow projection could be used as the basis for calculating net income, with minimal adjustment. Although the calculations were quite straightforward, not all candidates attempted all three thresholds or correctly applied the threshold definitions provided in the appendix. The first two thresholds were clearly defined, yet a surprising number of candidates failed to adjust for the grant when calculating the revenue threshold or to adjust for the grant and/or owners' salaries when adjusting income before taxes. The threshold relating to capital expenditures was also straightforward and the case facts were clear, yet a surprising number of candidates incorrectly applied the timing of the renovations to 2016 instead of 2017. Some candidates provided conclusions in the body of their response with no link or reference to any supporting calculations, so it was not clear what information was being used to reach these conclusions.

Strong candidates addressed all three thresholds for both 2016 and for subsequent years, correctly applying the definitions of the thresholds. These candidates generally provided a more organized and efficient layout for their response, listing the three thresholds and then providing supporting calculations in adjacent columns for each year. Strong candidates provided conclusions on whether each of these thresholds had been met, as well as what that meant in terms of grant repayment.

Weak candidates did not recognize the need to address both 2016 and subsequent years. These candidates did not use adjusted figures when calculating the revenue and net income thresholds, or they concluded without providing a calculation or referring to a specific figure as support.

**AO#4 (Review Planning Memo)**

Candidates were asked by the review engagement manager to discuss some of the general considerations for the review engagement, including the significant aspects on which the engagement team should focus, and to address materiality. Because this was the company's first review, it provided the candidates with opportunities to comment on issues such as the need to obtain knowledge of the business and the lack of prior year comparative figures. In order to demonstrate competence, candidates had to address the review engagement considerations, the significant aspects of the business, or both, and they had to explain how or why these are factors to consider in the review. Candidates were also expected to discuss and calculate materiality.

Candidates performed well on this AO. Most candidates were able to provide a discussion of some relevant review engagement considerations and explain why they were significant. The most commonly addressed considerations were knowledge of the client's business, issues relating to crowdfunding contributions (complexity of accounting; known errors), the potential grant claw-back (complexity of accounting; the bias to meet the thresholds and avoid repayment), and the overall approach to the review engagement. Most candidates also provided a reasonable discussion of materiality that considered the users of the financial statements and how they would use this information, and they then went on to calculate materiality.

Strong candidates were able to identify many of the relevant considerations for the review engagement. These candidates were able to integrate information provided throughout the case to determine the areas of focus for the review, and they clearly understood and explained why these were important in this case. Strong candidates linked their materiality calculation to the users of the financial statements, described how each of them would use this information, and completed their calculation.

Weak candidates identified a fewer number of general considerations and significant aspects of the review engagement. In addition, when they did identify some of these factors, they did not explain why they were significant to the review engagement. Weak candidates listed generic risks or considerations without linking them to specific facts from the case. For example, candidates discussed opening balances without recognizing that this was not an overall issue since it was ECCS's first year of operations and, therefore, only PP&E would have an opening balance. In addition, weak candidates provided a calculation of materiality that was not linked to the users' needs. Some weak candidates listed users without stating what their needs were, while others failed to consider users at all. Many weak candidates also demonstrated technical weaknesses, suggesting, for example, an inappropriate basis when calculating materiality.

#### **AO#5 (Review Procedures)**

Candidates were asked to provide review procedures relevant to the engagement. The case provided detailed information in several areas to allow candidates to provide specific procedures. The income statement and balance sheet were included in Appendix II, providing the candidates with many possible accounts for which they could provide procedures. In order to demonstrate competence, candidates had to provide some valid procedures that were relevant to the current engagement.

Candidates struggled on this AO. Most candidates were able to suggest some procedures; however, these were often too general, incomplete, or not useful in assessing the underlying account. Candidates also struggled to provide procedures that were appropriate for a review engagement, often providing audit procedures.

Strong candidates were able to suggest procedures that were specific, complete, and clear as to their purpose. Strong candidates focused on the specific risks relevant to the engagement given the facts presented, instead of addressing just any account on a set of financial statements. These candidates also recognized the difference between review procedures and audit procedures, and they provided procedures based on inquiry and discussion, as well as analytical procedures.

Weak candidates provided fewer procedures. These candidates suggested procedures that were incomplete, vague, not useful in assessing the underlying account, or very general. Many weak candidates also failed to incorporate the specific information provided in the case into their procedures. For example, some weak candidates provided a generic procedure for all revenue that could be applied to any organization, instead of a specific procedure aimed at assessing revenue sources such as, for example, membership and crowdfunding.

#### **AO#6 (Net Income for Tax Purposes)**

Candidates were asked to calculate ECCS's net income for tax purposes for the 2016 corporate tax return. Candidates were provided with an income statement in Appendix II and specific information about some expenses in the notes to the financial statements. Information required for calculating CCA was also found in the notes to the financial statements, as well as on the first page of the case. In order to demonstrate competence, candidates were expected to provide a reasonable calculation of net income for tax purposes, including some of the required adjustments to net income, as well as explanations for making those adjustments.

Candidates performed well on this AO. Most candidates were able to identify and explain some adjustments. Common adjustments were for the meals and entertainment expense, golf dues, political contributions, depreciation, and CCA. However, many candidates made errors in one or more areas, such as in their explanation of the deductibility of political contributions and in the calculation of CCA.

Strong candidates were able to address most of the adjustments and included technically correct explanations for them. Strong candidates also demonstrated better technical knowledge in the calculation of CCA, correctly determining CCA classes and rates for the three asset groups and recognizing that the half-year rule would not apply in 2016. Some strong candidates also addressed some of the less apparent issues, such as the need to add back and deduct a reserve for the deferred revenue relating to crowdfunding, or why the client food and beverage costs and the loan interest to a friend would be fully deductible.

Weak candidates included a fewer number of adjustments or did not include explanations for their adjustments. Weak candidates also lacked technical knowledge: for example, stating that political donations could be deducted in a later section of the tax return, suggesting that golf dues may be deductible if used for business purposes, or making significant errors in the calculation of CCA.

#### **AO#7 (Performance Measures)**

Candidates were asked by the client to discuss performance measures that should be put in place to determine how well ECCS is meeting its mission and values. The case stated the mission on the first page, and it included a paragraph stating the Greens' values on the second page. In order to demonstrate competence, candidates had to provide some performance measures tied to ECCS's stated mission and values.

Candidates performed well on this AO. It required them to think creatively to identify performance measures in a unique situation. However, the mission and values statements included many individual points, and this provided many opportunities to apply performance measures. The most common areas addressed by candidates included client enjoyment, improving lives, safety, and affordability.

Strong candidates provided several performance measures and directly linked each of these to an individual point within the mission and values of ECCS. These candidates suggested measures that were specific, useful, and practical, tending to provide a variety of different types of measures, such as quantitative and qualitative measures beyond the use of surveys.

Weak candidates did not address as many performance measures or provided measures without tying them to specific points within the mission and values statements. Some weak candidates provided measures that were not useful or practical. In addition, weak candidates were sometimes confused about their role and either included a mix of performance measures and advice or provided only advice as to how ECCS could accomplish its mission and values.



<b>Paper/Simulation:</b>	<b>Day 3, Case 2 (Kalpert)</b>
<b>Estimated time to complete:</b>	80 minutes
<b>Simulation difficulty:</b>	Average 1
<b>Competency Map coverage:</b>	Assurance (1); Finance (1); Taxation (2); Management Accounting (1); and Strategy and Governance (2);

### **Evaluators' comments by Assessment Opportunity (AO)**

#### **AO#1 (Net Profit Calculation of Book Format Options)**

Candidates were asked to tell Roxanne Kalpert which book format (printed versus e-book) is the most profitable. Details were provided in Appendix I regarding the printed book and e-book formats. Candidates were given information regarding the retail price, expected sales volume, and variable and fixed costs for the printed book and the e-book. Candidates were provided with two possible retail prices for the e-book. They were expected to use this information to prepare a calculation of the net profit for the printed book and the two e-book options to determine which one would be the most profitable.

Candidates performed well on this AO. Most candidates understood the need to provide calculations for the three options to give Roxanne a full picture of which format would be the most profitable. Most candidates correctly calculated the gross sales and also calculated the variable costs correctly before incorporating the fixed costs to arrive at a net profit. Information was clearly laid out in the case, and most candidates were able to pull the information together to provide valid calculations.

Strong candidates were able to challenge the estimates provided in the case and discuss whether they were valid using sensitivity analysis. Some strong candidates provided a break-even analysis to determine the e-book sales volume that was required to achieve the same profit level as for the printed book.

Weak candidates were not able to accurately integrate the case facts into their calculations. Typical errors included calculating the price of the e-book by applying the 30% on top of the already reduced retail price of 40% of the printed book (instead of simply taking 30% of the printed book retail price). Other errors involved inaccurately interpreting the case information. For example, the case mentioned that e-books are usually priced at 40% of the price of the printed book version, but some candidates used 60% ( $1 - 0.4$ ) in their calculation. Some candidates also interpreted the statement that "it is possible to sell 20,000 more books" to mean that 20,000 books would be sold in total with that option, when it was meant to be 60,000 books (20,000 books in addition to the first 40,000).

**AO#2 (Other Decision Factors for Printed versus E-book)**

Candidates were asked if there were other decision factors that Roxanne should consider in deciding between the printed book and the e-book. There were many points that candidates could have integrated into their discussion, with most of the information provided in Appendix I. Candidates were expected to discuss some of these points, explaining why they were an advantage or disadvantage to either the printed book or the e-book.

Candidates performed well on this AO. Most candidates realized the need to discuss qualitative factors before advising Roxanne. They explained why the relevant information in the case was an advantage or disadvantage to the printed or e-book format. Typically, candidates discussed that the e-book did not require chopping down trees, which would be friendlier for the environment, a significant concern especially for those with young children, which are Roxanne's target readers. Some candidates also mentioned that the free publicity for the e-book would allow Roxanne to reach more potential readers while staying focused on her core business, since she would not have to worry about marketing.

Strong candidates discussed many of the qualitative points presented in the case and clearly articulated why a point would be advantageous for one option over the other. Some strong candidates were able to go beyond the case facts to provide valuable analysis that was relevant to Roxanne; for example, identifying disadvantages of the e-book, such as the users' need to buy a tablet to purchase the e-book and the risk of electronic versions being pirated and distributed to many people illegally.

Weak candidates did not go beyond repeating the case facts. Since this was information already presented to Roxanne, merely restating it did not provide any additional value to her. Weak candidates also did not clearly communicate to the user whether a stated factor was an advantage or disadvantage to one of the book formats. Providing a generic listing of other factors to consider without providing any analysis of the items mentioned was not sufficient to demonstrate a clear understanding of the situation.

**AO#3 (Business Valuation)**

Candidates were asked to assess whether John's investment offer of \$200,000 for 40% of the viewing channel's profit was a fair price. Financial information for 2016 was presented in Appendix II, and industry information was presented in Appendix III. Candidates were expected to use the information provided, including the items that needed to be used to normalize earnings, in order to value the business. They were then expected to compare the results to John's offer to determine whether or not it was fair.

Candidates did not perform well on this AO. Although many candidates attempted to value the channel using both the EBITDA multiple and the value-per-subscriber methods, many failed to demonstrate their understanding of normalizing adjustments to arrive at a reasonable EBITDA for their valuation. Some candidates used the financial information given in the case and did not consider any adjustments, while other candidates used their income from the taxes payable calculation and did not consider any additional adjustments that would be required to normalize earnings (such as the general manager's salary of \$75,000).

Strong candidates demonstrated a clear understanding of the normalization adjustments by incorporating them in their EBITDA valuation and explaining the reasoning for the adjustments (for example, the item was non-recurring or not for business purposes). Many strong candidates were able to accurately calculate the one-time increase in revenue from the viral views and remove it from EBITDA, as well as include the expected general manager salary of \$75,000 into their EBITDA calculation. Strong candidates calculated a value under both methods and used the 40% basis to determine whether or not John's offer was fair.

Some weak candidates did not understand the concept of valuation and added both the EBITDA and the value per subscriber to arrive at an unreasonable valuation. Other weak candidates did not understand the concept of EBITDA and included erroneous items such as amortization or capital cost allowance (CCA) in their valuation base. Some weak candidates did not attempt to calculate a valuation using both methods, while others did not use a 40% basis to accurately assess whether or not John's offer was fair.

#### **AO#4 (Fit of Opportunities with Values and Goals)**

Candidates were asked what other factors Roxanne should consider in deciding whether to move forward with the book and whether to accept John's investment offer. The main body of the case provided background information that was relevant to this analysis, including Roxanne's business being unincorporated, her belief in making new parents' lives easier, and her past experience with John. Due to the strategy context of this AO, the relevant case information was not conveniently presented to candidates in an appendix, but candidates were instead required to take a step back and consider Roxanne's situation in order to perform an adequate analysis. To demonstrate competence, candidates had to use the facts provided to build an argument as to whether or not the opportunities fit with Roxanne's values and goals.

Candidates performed adequately on this AO. Many candidates were able to draw on the information about John from the main body of the case and use it to analyze the fit with Roxanne and her business. The typical analysis revolved around the heated arguments in the past, the misalignment of values (between unnecessary recalls versus protecting babies), and John's business experience. Although most candidates addressed the fit of the investment with Roxanne's values and goals, most failed to step back and provide a strategic analysis of whether Roxanne should pursue the book opportunity.

Strong candidates not only analyzed the strategic fit between Roxanne and John, but also provided a strategic analysis of whether Roxanne should pursue the book opportunity. The most common analysis for the book opportunity included whether she would have time to pursue it given her current situation (managing the video channel, raising young kids, having her husband leave for a work contract), as well as the alignment of the opportunity with her personal dream and her mission.

Similar to AO#2, weak candidates did not go beyond repeating the case facts. Because this was information Roxanne already had, merely restating it did not provide any additional value to her. Most weak candidates did not provide an analysis of the fit of the book opportunity with Roxanne's values and goals.

**AO#5 (CRA Audit Procedures)**

Candidates were told by Roxanne that the CRA was going to be auditing her 2015 personal income taxes. Roxanne wonders what the CRA is worried about and asks CPA to provide examples of specific procedures CRA would likely do. To demonstrate competence, candidates were expected to explain the purpose of the audit and provide examples of procedures that the CRA would perform, including procedures on specific revenues and expenses that were presented in Appendix II.

Candidates did not perform well on this AO. While some candidates were able to explain the CRA's main concern of overstated expenses and understated revenue, many candidates were not able to provide procedures or risk discussions that were relevant to Roxanne and her situation. The typical response was too generic for Roxanne to understand what the CRA would be doing and why. For example, some candidates suggested Roxanne keep her receipts for her expenses and her T4 slips for revenue, which on its own did not answer Roxanne's questions.

Strong candidates understood the requirement well and tailored their response so it was relevant to Roxanne and her situation. In addition to explaining that the CRA's main concern was that revenue may be understated and expenses may be overstated, which would result in less taxes payable, they discussed specific line items. They typically started with the CRA's concerns from a taxation perspective (for example, that any personal travel would not be deductible) before discussing an appropriate procedure that the CRA would perform. Strong candidates provided several specific procedures typically related to the revenue, home office, travel, and vehicle.

Weak candidates attempted to discuss CRA's concerns, but their discussion was non-specific, stating, for example, that the CRA is worried the amounts could be inaccurate. Weak candidates provided procedures that were too generic to be of value to Roxanne, stating, for example, that Roxanne should keep her receipts and T4 slips. Many candidates' discussions were short and intertwined with the analysis of the taxes payable. Some weak candidates provided information about the deadlines for tax filing and the applicability of interest and penalties, rather than answer the required about the purpose of the audit and provide examples of procedures that could be performed.

**AO#6 (Calculation of Federal Taxes Payable)**

Candidates were asked to estimate Roxanne's federal taxes payable, and relevant information was provided within Appendix II regarding Roxanne's revenue and expenses. Appendix II also discussed her video equipment and capital cost allowance (CCA) information, which should have been used to calculate CCA for her 2016 taxes payable. Finally, the reference schedule at the end of the exam booklet, contained the federal income tax rate table that they should have used to calculate Roxanne's taxes payable. To demonstrate competence, candidates were expected to adjust Roxanne's expenses according to what is taxable and not taxable in order to calculate her business income, and then calculate her taxes payable, taking into account the deductions and credits that were applicable to her situation and using a reasonable rate.

Candidates performed adequately on this AO. Most candidates attempted to address this required. The most common issues found in responses related to candidates' inability to clearly explain the reason for their adjustments. There was also a wide range of tax rates used to arrive at the taxes payable total. Some candidates correctly used the tax table from the reference schedule to arrive at a reasonable total, while others provided a flat rate or incorrectly interpreted the tax table by adding the base amounts from all the tax brackets. Most candidates attempted to calculate the CCA for both capital assets but typically would have an error with the 2015 purchase and the application of the half-year rule.

Strong candidates set up their taxes payable calculation with appropriate reference notes for each line item that required an explanation. They included a discussion of the reasons they adjusted the travel and vehicle expense (business versus personal) and accurately calculated the CCA for both capital assets, using the half-year rule appropriately. Strong candidates clearly understood how the graduated rates worked and provided a reasonable taxes payable total. Many strong candidates were also able to demonstrate their understanding of personal tax credits.

Weak candidates either did not make any adjustments to the revenue and expenses provided in the case or used their total from the finance EBITDA calculation without making the appropriate tax adjustments (such as removing the general manager salary that was not incurred, or adding back the \$70,000 revenue that was removed from EBITDA because it was non-recurring). Weak candidates seemed to struggle to apply a reasonable tax rate to the taxable income and did not show a good understanding of how the graduated tax rates work. Other weak candidates did not read the case carefully and attempted to calculate corporate taxes payable instead of personal taxes payable.

#### **AO#7 (Residency and Tax Implications)**

Candidates were asked to explain to Roxanne some factors that would affect the determination of her husband's residency for Canadian tax purposes, as well as how the income he earned in the United States would be taxed in Canada. Candidates were expected to discuss both of these topics in order to demonstrate competence on this AO.

Candidates performed reasonably well on this AO. Many candidates were able to identify several residency ties and analyze how they applied to Roxanne's situation. The most common ties identified were the house, spouse, and dependants. Many candidates went even further and did a good job of concluding that the spouse would remain a Canadian resident based on his ties, which led to their analysis of how the U.S. income would be taxed in Canada. For this portion of the requirement, many candidates concluded that Roxanne's husband would be taxed on his worldwide income.

Strong candidates were able to clearly differentiate between primary and secondary residential ties. They were also able to identify more ties, most commonly the personal property (such as vehicles) and economic ties (such as bank accounts). Strong candidates also provided more analysis on the U.S. income, typically by discussing the tax treaty between the United States and Canada that prevents double taxation and by discussing the foreign tax credit that reduces some of the foreign taxes paid on income earned outside of Canada.

Weak candidates did not understand the tax concepts and instead focused their discussion on the sojourning rules, which did not apply to Roxanne's situation. Other weak candidates provided incorrect tax information to Roxanne, including a discussion of her husband's intent to return to Canada, which is not considered a residential tie. Many weak candidates attempted a discussion of foreign tax credits without addressing Roxanne's main question of how the U.S. income would be taxed in Canada. Some weak candidates misunderstood the requirement and attempted to discuss how the income would be taxed in the United States and not in Canada.

<b>Paper/Simulation:</b>	<b>Day 3, Case 3 (W3)</b>
<b>Estimated time to complete:</b>	70 minutes
<b>Simulation difficulty:</b>	Average 1
<b>Competency Map coverage:</b>	Finance (1); Financial Reporting (1); Management Accounting (2); and Strategy and Governance (1)

### **Evaluators' comments by Assessment Opportunity (AO)**

#### **AO#1 (SWOT and Key Success Factors)**

Candidates were asked to address the company's strengths and weaknesses and the opportunities and threats in its external environment (SWOT). They were also asked to list the most important factors for ensuring the long-term success of W3. Throughout the simulation, candidates were provided with information relating to the environment of W3. Appendix I provided information on the Canadian home-renovation market, and Appendix II provided general information on W3. To demonstrate competence on this AO, candidates had to prepare a reasonable SWOT analysis, going beyond the case facts provided, and analyze the key success factors (KSF) identified in Appendix I (timely delivery, quality workmanship, and cost control) as they related to W3.

Candidates performed adequately on this AO. Most candidates addressed all four areas in their SWOT analysis. Candidates appropriately classified the case facts into the areas of the SWOT they related to, and most provided a few case facts for each area. Some were able to integrate results from their other analysis in their SWOT analysis. For example, some candidates addressed the overall financial health of W3, as determined in their ratio analysis (AO#4), or problems identified with the different divisions, from their variance analysis (AO#2), as valid SWOT considerations. Candidates struggled to go beyond the simulation facts and explain to the client why the information presented in the simulation was relevant to the analysis. Most candidates were able to identify the KSFs presented in the simulation and restate them in their response, but many struggled to provide additional analysis of these factors.

Strong candidates performed a reasonable SWOT analysis by addressing all four areas, developing points beyond the case facts. Additionally, these candidates were able to appropriately recognize the correct KSFs and discuss them in further depth.

Weak candidates were able to sort the case facts into the appropriate SWOT areas but were unable to provide any added value beyond what was already stated in the simulation. These candidates also did not use the KSFs, or they came up with ones that were not stated in the simulation since they failed to recognize that the information was provided to them in Appendix I.

**AO#2 (Variance Analysis)**

Candidates were asked to explain the source of the significant variances, since William was puzzled by how one division could be doing well while the other division was not. In Appendix IV, candidates were given the 2017 cost variance information. Information to assist candidates in addressing the cause of the variances was provided in Appendix II. To demonstrate competence on this AO, candidates had to explain a sufficient number of variances for each division using the information provided. In addition, candidates had to recognize that the decisions made by the manufacturing division (or by Eli directly) to cut costs by hiring unskilled labour or sourcing cheaper materials is what led to the negative variances in the installation division.

Candidates struggled with this AO. Most candidates were able to analyze a sufficient number of variances; however, they were unable to step back and address the management decision that led to the negative variances and to recognize its impact on the installation division. Most candidates addressed only the individual variances without uncovering the reason behind the poor performance.

Strong candidates analyzed most of the variances for each division appropriately. They saw that management's decision to source cheaper products and labour had a negative impact on the installation division. These candidates recognized that the decisions Eli made affected the installation division directly, and overall provided a thorough analysis.

Weak candidates did not address a sufficient number of variances or were unable to discuss the cause of a variance as it applied to the appropriate division. These candidates had difficulty applying the information provided to the specific variances, and many applied the case facts to the wrong variance or division. For example, some candidates suggested that the cracking frames were the cause of the negative direct materials efficiency variance in the manufacturing division, when they were, instead, the cause of the variance in the installation division. These candidates failed to recognize the impact on the installation division of the decisions made in the manufacturing division.

**AO#3 (Responsibility Centre and Transfer Pricing)**

Candidates were asked to prepare an analysis of whether the current responsibility centre for each division and the transfer pricing policy were appropriate. Candidates were expressly told in Appendix II what each division was being managed as (i.e., cost centre and profit centre) and what the current transfer pricing policy was. To demonstrate competence, candidates had to provide some analysis of the responsibility centres and discuss the current transfer pricing policy. Candidates could discuss the responsibility centres from the perspective of either control of the inputs and revenues or goal congruence between the division and the company as a whole. They could discuss the transfer pricing either by addressing the existing policy appropriately or by recommending a different policy based on divisional performance or overall benefit to the company.



Candidates struggled with this AO. Most candidates were able to identify either the current responsibility centre or the transfer pricing issues but were unable to provide any additional value beyond stating that the current policies were either appropriate or inappropriate. Candidates had difficulty applying the case facts to address the situations, and many recommended inappropriate policies; for instance, recommending that the manufacturing division become a profit centre so it could add profit to the company, which would improve profitability overall. Candidates' conclusions on this AO were often not consistent with their analysis.

Strong candidates were able to address both issues in more depth. These candidates addressed the reasons why the current responsibility centre set-up, for one or both divisions, was appropriate, linking the discussion with what that division could or could not control or with the company goals. Strong candidates either supported why the current transfer pricing policy was appropriate or provided a valid alternative.

Weak candidates only identified the current policies without providing any added value (for instance, stating that the manufacturing division is a cost centre and is appropriate, without further explanation). These candidates appeared uncomfortable with the material presented and did not know how to address it in the context of responsibility centres or transfer pricing. Their discussions lacked depth, and they did not demonstrate sufficient technical knowledge of the issues.

#### **AO#4 (Ratio Analysis)**

Candidates were asked to assess W3's financial performance using ratio analysis. They were given multiple sources of information with which to perform their analysis. In a chart in Appendix I, they were given industry data through five different ratios, and Appendix II provided the same ratios for W3 for 2016 and 2015. Candidates were given the most recent unaudited financial information for W3 in Appendix III, including notes that provided supplemental financial information necessary for calculating the five ratios. To demonstrate competence, candidates had to perform a reasonable ratio analysis and comment on W3's financial performance.

Candidates did well on this AO. Most candidates were able to compare the industry information to the 2016 and 2015 information for W3. Candidates were able to discuss the mechanics of each ratio or how to interpret it. Few candidates calculated the 2017 ratios, even though the balance sheet and notes were provided in Appendix III. Some candidates had difficulty explaining the inventory turnover ratio, incorrectly stating that the ratio was increasing and, therefore, inventory was taking longer to sell. Candidates also struggled to explain what the net profit margin and return on equity ratios mean to a company. Many candidates' explanations were not specific to the case facts. For example, some candidates stated that because the current ratio was high, it might mean the company has a lot of cash, but they did not refer to the amount of cash the company currently has (\$1.3 million).

Strong candidates calculated a number of 2017 ratios appropriately. These candidates also explained what each ratio meant or what it was intended to calculate. Many of these candidates integrated the results of the combined ratios together and recognized that, overall, W3 was performing well above the industry average.

Weak candidates attempted to address the ratios solely by comparing W3's 2016 ratios to those of 2015 or by comparing W3's ratios to the industry information. These candidates focused on whether a ratio was better or worse and failed to explain what the ratio was saying about the company's performance. They provided generic comments about the ratios without any link to W3's situation. Many weak candidates confused what the ratios meant (for example, stating that low debt to equity meant a company was more leveraged or that high inventory turnover was an indication of poor performance). These candidates were unable to interpret the results of the ratios with any validity.

### **AO#5 (New Equipment)**

Candidates were asked to provide their thoughts on the proposal to acquire new automated installation equipment. All necessary information was presented in Appendix V. Candidates were directed to ignore any tax and financial reporting implications. To demonstrate competence on this AO, candidates were expected to address whether W3 should purchase the equipment (presenting a go/no-go net present value (NPV) analysis) and analyze the financing options to determine which one was the best, using a reasonable and comparable approach to all three options. Candidates were also expected to address some qualitative considerations for the financing options.

Only a few candidates first analyzed whether purchasing the equipment was appropriate before analyzing which financing option to accept. Most candidates assumed the decision to go ahead with the project had already been made and, therefore, attempted to evaluate all three financing options using an NPV analysis, and then concluded on which financing option to pursue. Candidates performed more calculations than the simulation warranted, attempting to perform an NPV calculation for each financing option, even though data was not available to put the options on equal footing. These candidates failed to take all case facts into account. For example, some candidates did not realize that the lease option provided for maintenance and repairs at no cost, and they quantitatively compared that option to the others without mentioning those incremental costs for the other options. Some candidates also included the annual incremental net cash inflows in one or two of the options only and, therefore, failed to provide comparable calculations for all the options. Others included the upfront purchase price in all three options. Additionally, some candidates did not recognize that the lease would need to be evaluated over the same life expectancy as that of the other options, and instead calculated it on the one- or two-year renewal term only.

Strong candidates addressed the decision of whether to go ahead with the purchase first by looking at the ending NPV of the cash purchase option, concluding the NPV was positive, and then discussing valid qualitative considerations. For example, some candidates addressed whether W3 would want to use all its available cash for the purchase, some noted that W3 did not have enough available cash, and some addressed the flexibility of the lease terms or its inclusion of all repair and maintenance costs.

Weak candidates addressed the financing options, rather than deciding whether to go ahead with the project. These candidates then had difficulty putting the three financing options on a comparable basis, often making conceptual errors as to which items to include or exclude from their calculation, resulting in calculations that were not comparable. Other weak candidates compared one or more of the options using simple math (annual payments times a 12-year life expectancy), not taking the time value of money into consideration, or using a different rate to calculate NVP for each option. These candidates were unable to evaluate the options in a way that would be useful to the client.

The CPA certification program prepares future CPAs to meet the challenges that await them. For more information on the qualification process, the common final examination (CFE), and the specific education requirements for your jurisdiction, contact your provincial/regional CPA body.

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